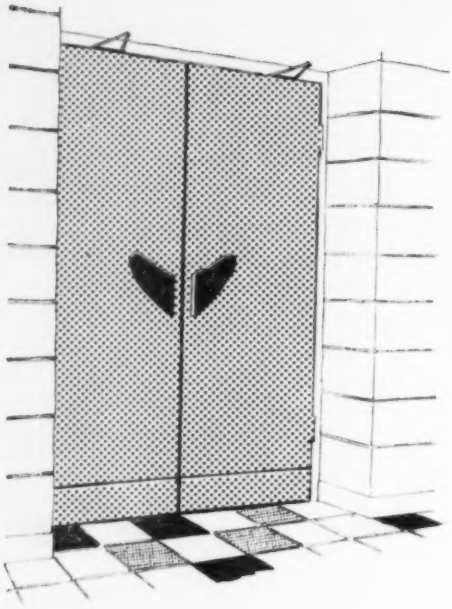
THE ARCHITECT & BUILDING NEWS

12 AUGUST 1959 VOL. 216 NO. 1 ONE SHILLING WEEKLY

- **CHURCHILL COLLEGE COMPETITION–1**
- **CURRENT MARKET PRICES AND MEASURED RATES**

PUBLISHED IN LONDON SINCE 1854



Only the SLIM arms can be seen

The "No. 500" is a new door closer designed for use when the appearance of the door and surroundings are of first consideration. With nothing visible except the slim arms, which are styled to be as streamlined and unobtrusive as possible, it achieves complete concealment without loss of power or door control. The "No. 500" is suitable for internal single-action doors not exceeding 7′ by 3′ in size, and 70 lbs. in weight.

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Architects:
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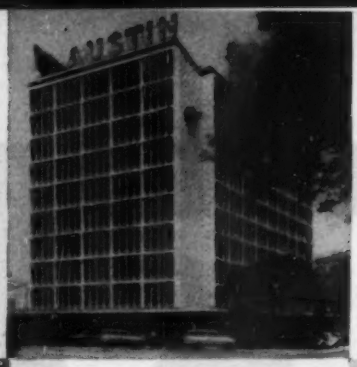

TOWN COUNCIL OF
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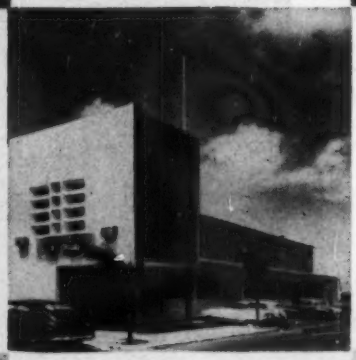
Architects:
Boulle-Lagesse & Schaub

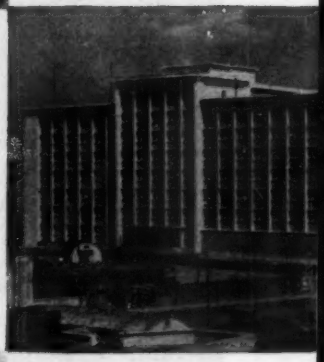
BRITISH COLUMBIA PROVINCIAL
GOVERNMENT OFFICES · VICTORIA
Architects:
Provincial Government
Architectural Department

SHELL BUILDING · LAGOS
Architects:
Walker, Harwood & Cranswick

K.L.M. BUILDING · CURACAO
Architect:
Alec Van Ness



POLICE HEADQUARTERS
HONG KONG
Architects:
P. W. D. Hong Kong



NGEE ANN KONGSI FLATS
SINGAPORE
Architect:
Ng Keng Siang

ADMIRALTY FLATS
MOUNT AUSTIN · HONG KONG
Architects:
Palmer & Turner

ASIATIC POLICE QUARTERS
KOWLOON
Architects:
P. W. D. Hong Kong

ALEXANDRA HOUSE · HONG KONG
Architects:
Spence, Robinson & Partners

THE ARCHITECT and Building News,
12 August 1959

AFRICAN LIFE BUILDING
BULAWAYO · S. RHODESIA
Architects:
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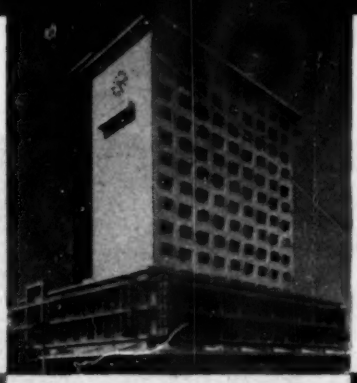
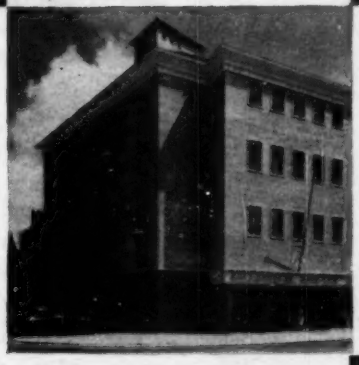


R.N.V.R. BUILDING · HONG KONG
Architects:
P. W. D. Hong Kong

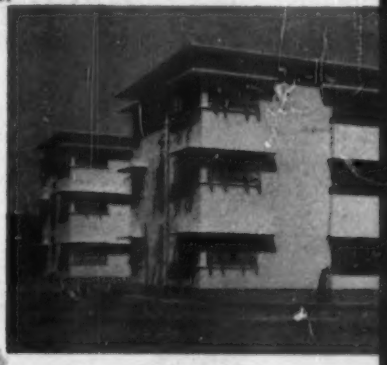
WORKING CLASS FLATS
HONG KONG
Architects:
Chan & Lee

OFFICES FOR TRANSVAAL
& CHAMBER OF MINES
JOHANNESBURG
Architects:
K. E. F. Gardiner &
MacFabgden

HOLLANDSCHE BANK
UNIE · CURACAO
Architect:
Ben Smit



FLATS FOR
SINGAPORE HARBOUR BOARD
Architects:
Swan & McLaren



BANK OF CHINA
SINGAPORE
Architects:
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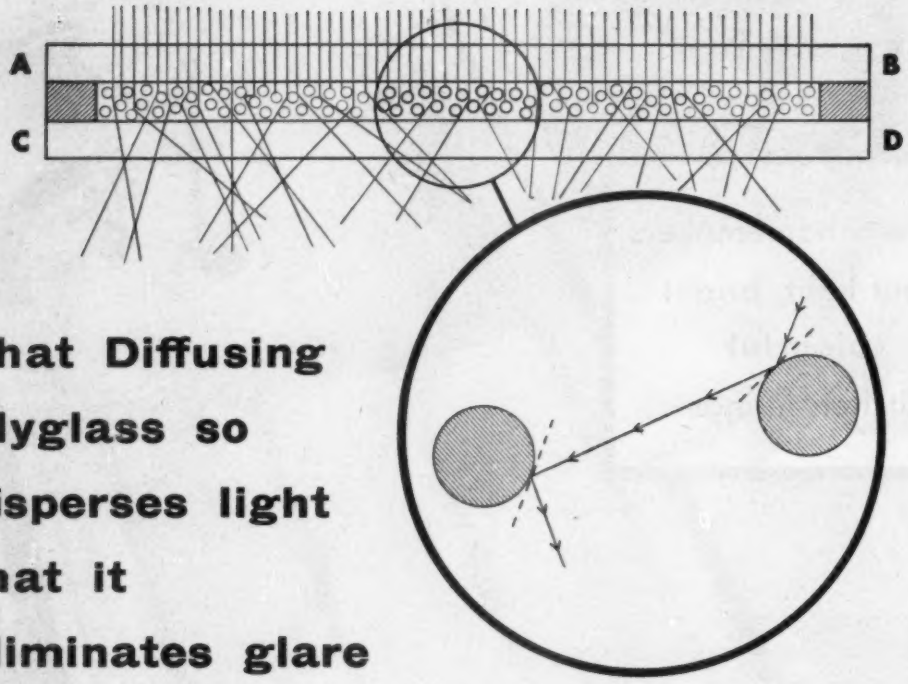
Theorems of **PLY***thagoras No. 4*



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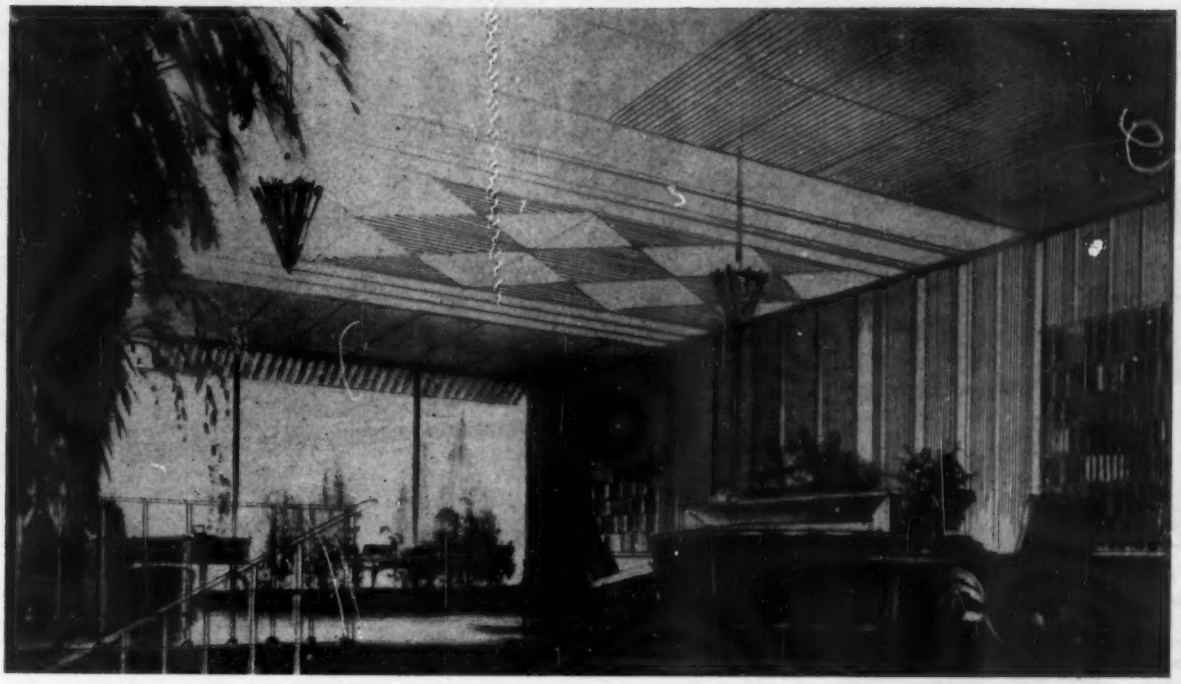
Design for Silence . . .



Where before there was noise and echo, silence reigns. In planning the modern interior, the lowering of the level of internal noise is an essential part of modern living. To this end, Hermeseal have combined the most satisfactory visual treatment of wall and ceiling surfaces with the maximum absorption of sound. Each problem receives individual treatment by experts in acoustics — each installation adds to the decor of home or office. Write for further particulars.

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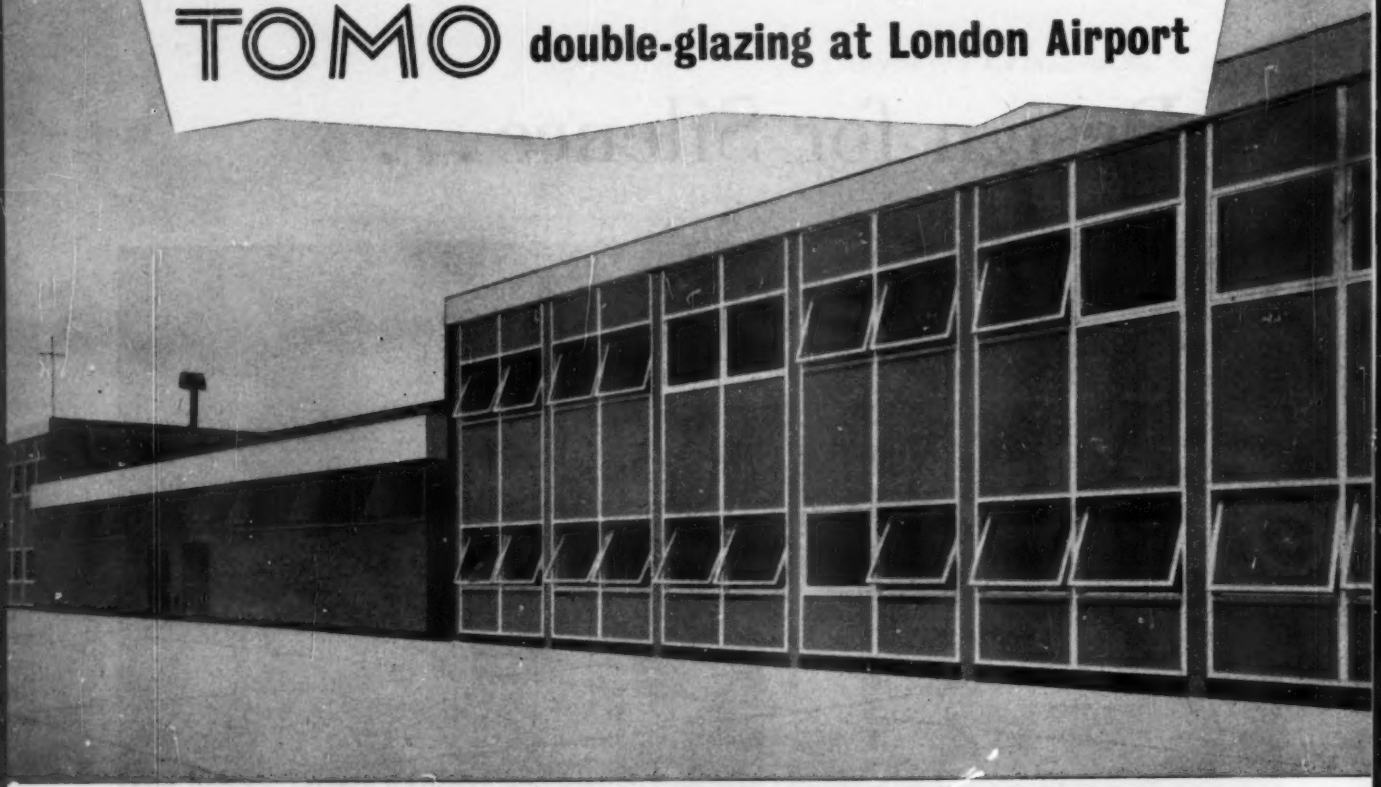
TOMO double-glazing at London Airport



We think you'll agree that the appearance of these attractive offices at London Airport is enhanced by their TOMO double-glazed WINDOWS. But that's only a small part of the story. TOMO double-glazing also offers excellent thermal-efficiency values, remarkable sound-reduction properties, finely-controlled ventilation and total indoor window-cleaning.

On the subject of thermal efficiency, we should like to refer you to the report of a recent B.R.S. test quoted on the right. It speaks volumes. When you work within whistling distance of aircraft, sound reduction becomes a matter of vital importance. Here TOMO WINDOWS score heavily. The total reduction in sound level depends finally, of course, on the thickness of glass employed and the space between panes. Using 32-ounce glass spaced at 1⅜in, TOMO double-glazing gives a reduction of approximately 40 decibels and will, we hope, save Shell-Mex and Esso personnel not a few headaches in the future.

One last point, TOMO double-glazed WINDOWS are suitable for inward or outward opening and can be top-hung, bottom-hung, side-hung or pivot-hung. Any further information you may require will be gladly supplied.

Administrative and operations offices for aviation fuel supplies at London Airport, half of which are occupied by Shell-Mex & B.P. Ltd. and the other by Esso Petroleum Co. Ltd. Architect: Frederick Gibberd, C.B.E., F.R.I.B.A., M.T.P.I.

★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★

BUILDING RESEARCH STATION TESTS

When a standard-production TOMO WINDOW Wall-Unit (8ft. × 8ft.) was tested at the Building Research Station, Garston, the mean thermal transmittance of the complete unit was found to be 0·31 B.Th.U./sq. ft./h/°F. This is equal to the thermal transmittance of a traditional 11-in. cavity brick wall! This impressive result was further improved to 0·29 when the TOMO pleated blinds, fitted between the panes, were lowered. The U-value of the window-area only was found to be 0·38 which, with TOMO pleated blinds down, became 0·35. At 0·38, TOMO double-glazed WINDOWS are substantially (29%) better than the U-value of 0·47 quoted for conventional double windows in the I.H.V.E. Guide to Current Practice, 1955.

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5. AQUASEAL 66 is completely colourless and cannot affect the appearance of the surface treated.

6. Treated walls keep cleaner—water-borne soot and dirt cannot penetrate so easily.

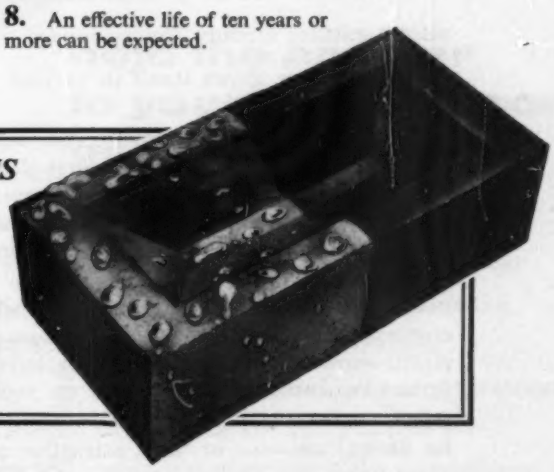
7. Chemically inert and does not damage masonry.

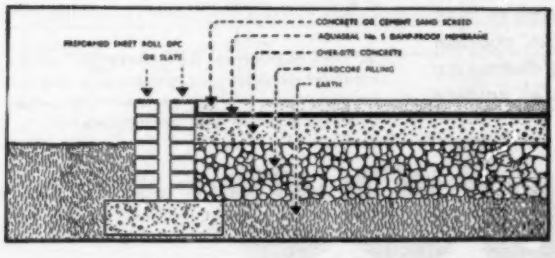
8. An effective life of ten years or more can be expected.

SEE HOW EFFECTIVE AQUASEAL 66 IS

Samples of common brick treated with Colourless AQUASEAL were immersed in ¼" water and tested for absorption after 24 and 168 hours.

EXPOSURE TIME IN HOURS	% WATER ABSORPTION	
	UNTREATED BRICKS	TREATED BRICKS
24	16.37	0.00
168	16.94	0.01





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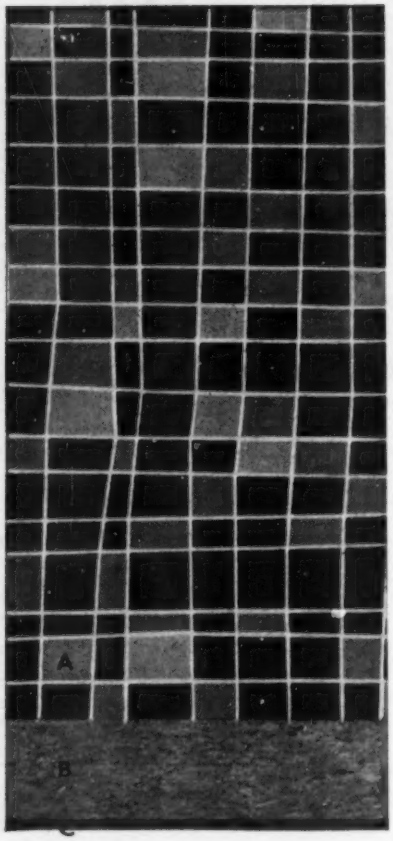

A. This design is one of the new Weydec surfaces.
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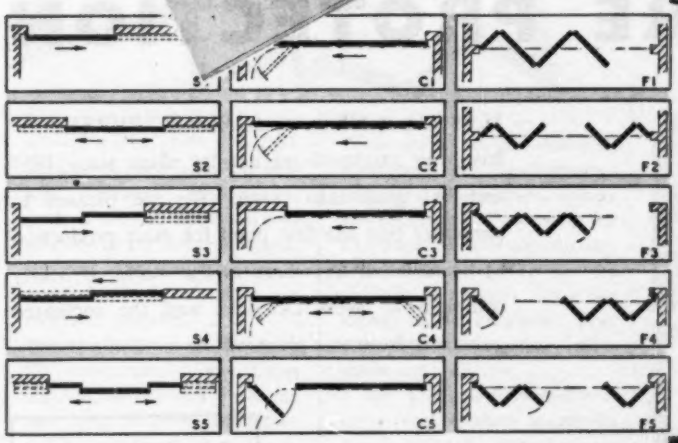

In the latest architectural edition of "The Sliding Door", issue 29, there are well over a hundred pages of useful information concerning sliding door gear and its application. They include photographs, technical data and scale drawings. This book will help you to tackle your sliding door problems. If by some chance you have not received your copy, please let us know.

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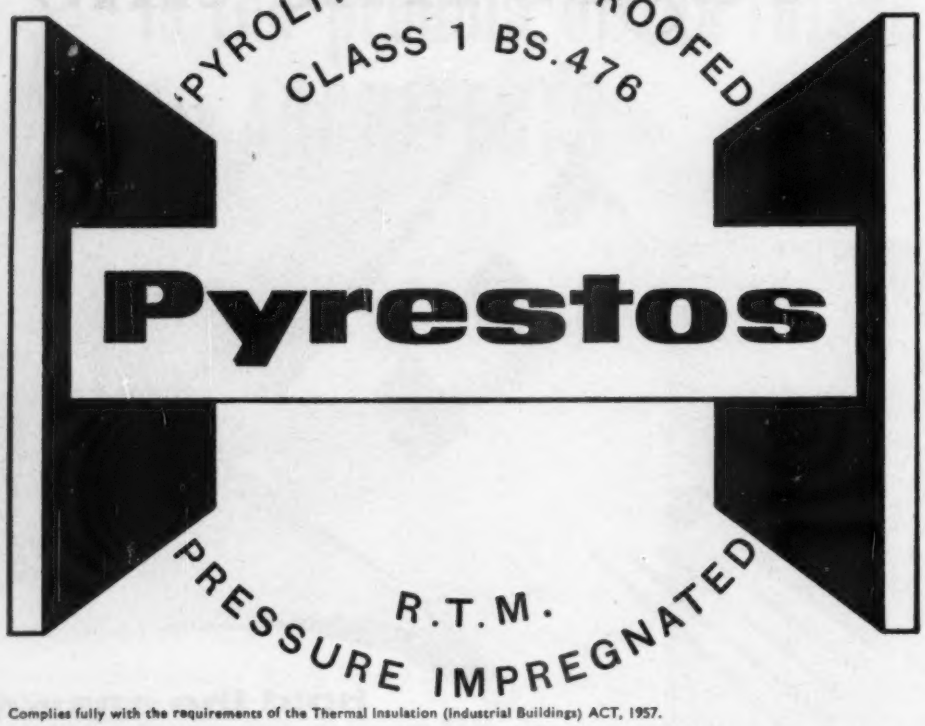

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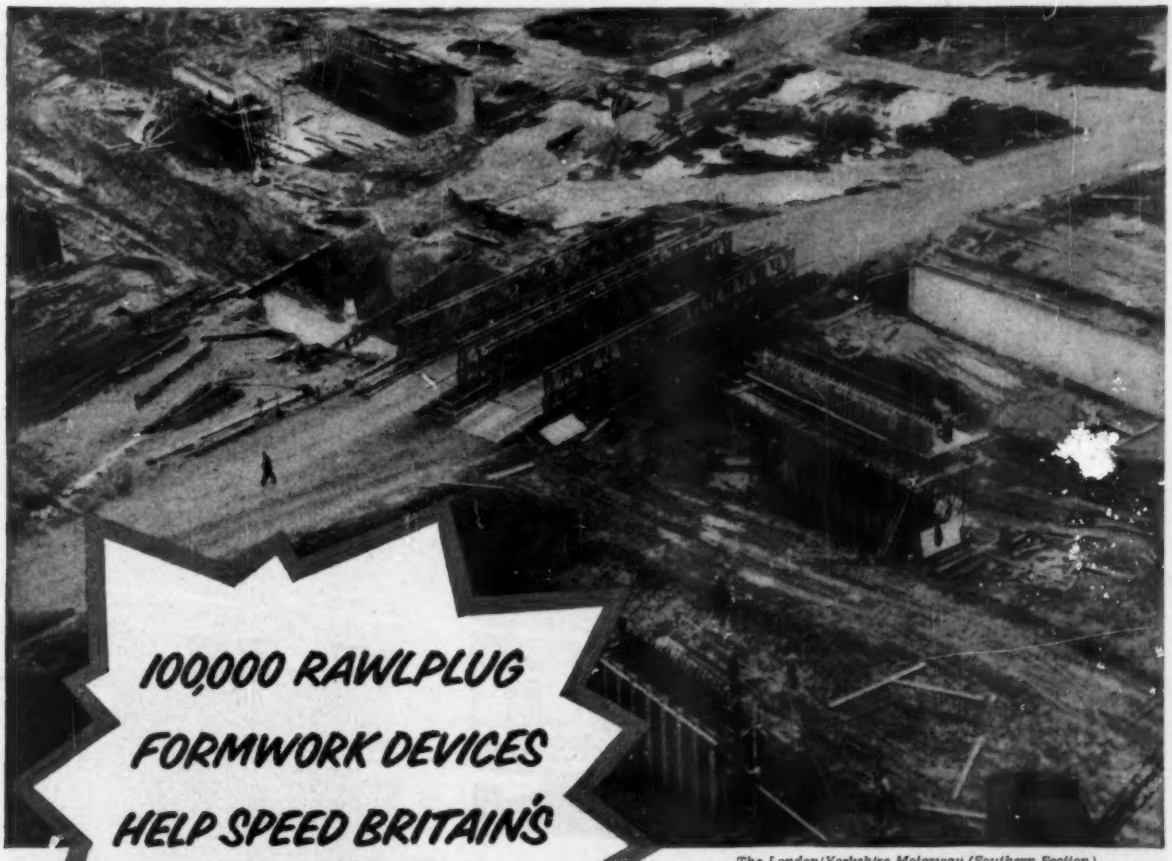

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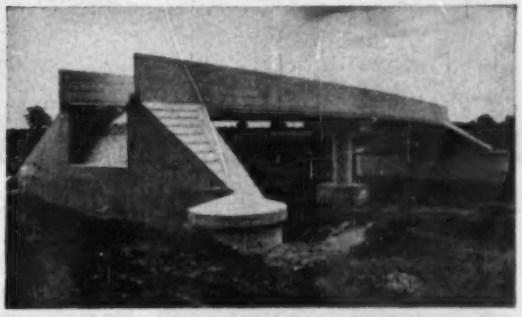
The London/Yorkshire Motorway (Southern Section) Bridge abutments for fly-over at Collingtree. Bailey Bridge for temporary diversion roads.

2 Span Overbridge—constructed in 17 days. Photographs by kind permission of John Laing and Son Limited.



From the new St. Alban's By-pass to near Rugby—a 55 mile dual-carriageway high-speed motorway, involving 11½ million cubic yards of excavation and the construction of 132 concrete bridges, and all to be completed in 19 months! Typical examples are illustrated herewith.

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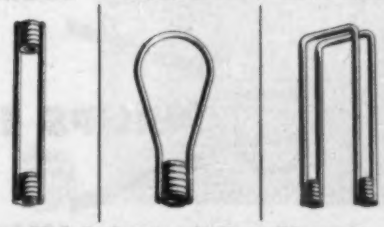

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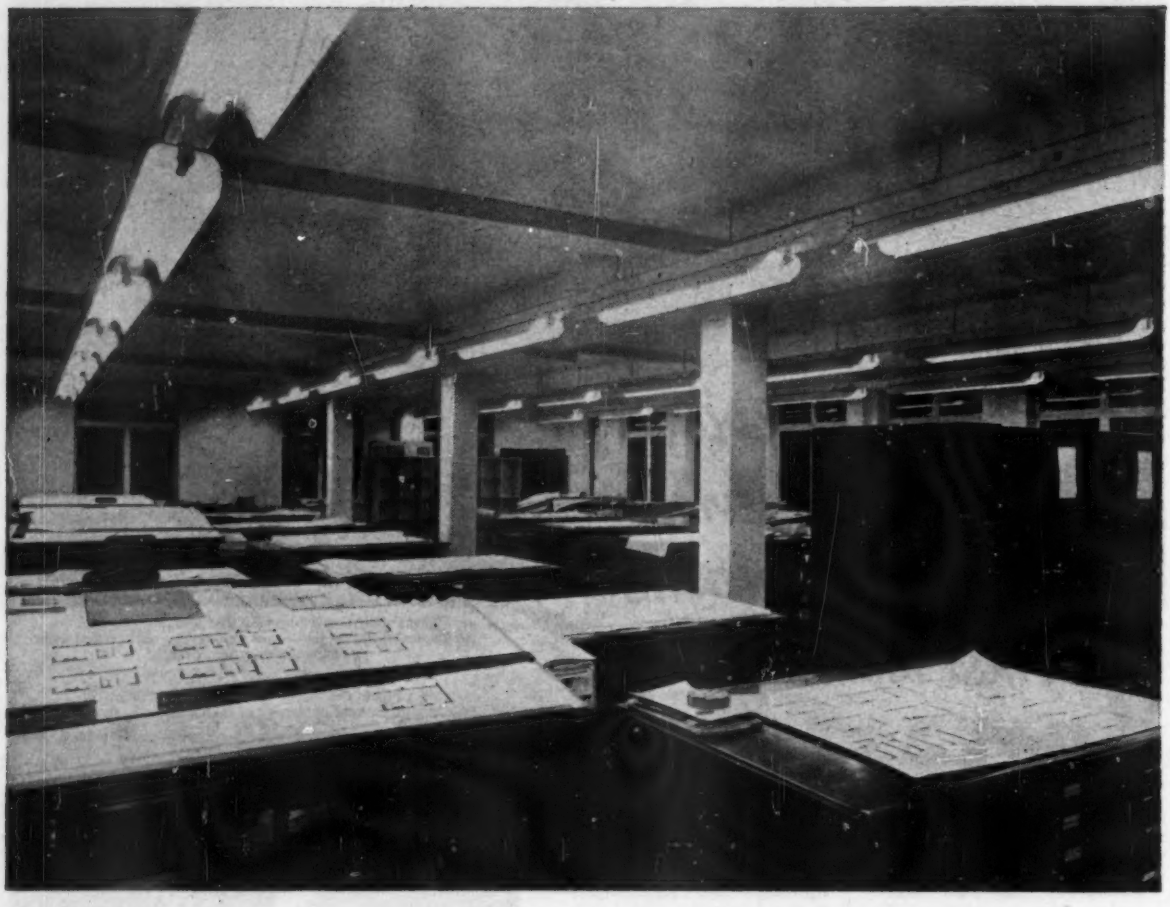

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ARE COMPETITIONS TOO RIGID?

IN the past it has been a generally accepted principle, we believe, that architectural competitions are held to find, if possible, a design of exceptional merit—what R. Furneaux Jordan in his article overleaf calls "an architectural break-through". It is for this reason —this emphasis on design—that a far-sighted competitor, seeing beyond the limitations of the competition conditions, sometimes breaks them in order to improve his scheme; and perhaps in so doing he produces something better than had been thought of by anyone before.

It is disturbing therefore to read in the assessors' report of the limited two-stage competition for Churchill College (the first two designs of which are published in this issue) that they selected to win a very competent scheme which met all their requirements for a satisfactory college, but relegated one which they frankly labelled "of exceptional merit".

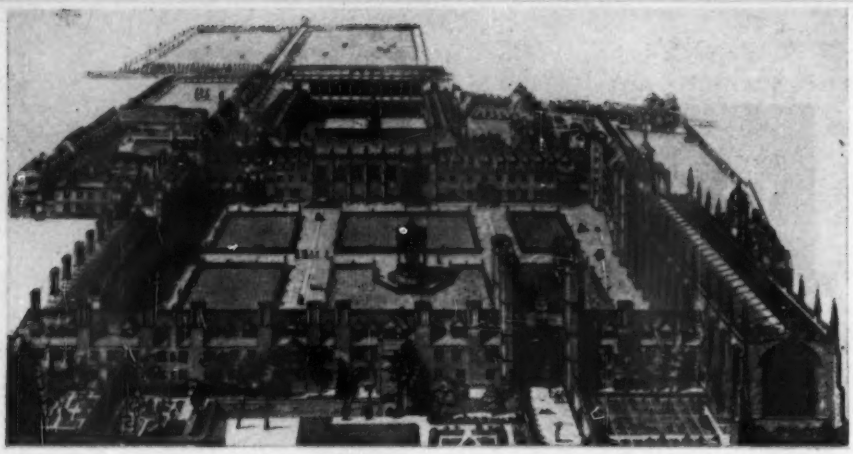
Among the reasons given against the "exceptional" scheme was its greater cost than the target figure of £1,100,000. A nebulous sum this and a modest one, we think, to provide a building dedicated to the greatest Englishman of our era. Moreover, the college building, the competition conditions declared, ". . . should stand comparison with the great buildings of the past . . ." and be ". . . a worthy monument of lasting materials".

Were the assessors hamstrung by the competition system?

Architectural competitions held in this country in the past decade, and many before, have been a disappointment on the whole. All sorts of reasons why have been put forward. The open competition is frowned on for the extent of wasted effort; limited competitions, in one or two stages and in which a number of architects are invited to submit designs, have many advantages. Have the advantages been fully exploited? Are competition conditions always sufficiently flexible, and yet firm where they need to be, so that a competitor recognizes the real needs? In the majority of post-war winning schemes, conditions have been broken and advantages gained; but among the less experienced of the losers, this is a source of grievance. The problems are not easy of solution.

Two things would appear to us to be desirable. First, in all architectural competitions it should be made much clearer what conditions are irrevocably binding and what conditions can be broken, if in the opinion of a competitor it helps the development of his ideas. Secondly, after the first stage of a two-phased competition, identities should be disclosed; an element of trust ought to enter the proceedings. After all, the ritual of anonymity was devised by the R.I.B.A. long ago to counter various forms of nineteenth-century corruption; is it any longer strictly applicable? Before the second stage is entered, each competitor might usefully be interviewed by the assessors, his scheme frankly discussed, adverse tendencies pointed out and so on, much in the spirit of the architectural school "crit" of today.

Some more flexible competition system of this kind is needed so that in the final analysis the merits of alternative schemes are able to be judged on design qualities alone.



Architect & Building News,
12 August, 1959

Loggans view of Trinity College, Cambridge (c.1688) from the work by W. D. Carôe, reproduced by courtesy of the Master and Fellows of Trinity College. On the facing page is the plan of the College's development, from Robert Willis's "Architectural History of the University of Cambridge" reproduced by courtesy of the Cambridge University Press. The plan is reproduced again on pages 10 and 17 to compare the scale with schemes for Churchill College

Churchill Memorial College

The Price of Greatness

R.
FURNEAUX
JORDAN

"EVERY attempt has been made to create something which would be unmistakeably a college and could not be taken for a school or a group of housing."

These words are from the Report which Howell, Killick and Partridge submitted with their design for Churchill College. It would be difficult to define more clearly the ideal which the competitors should have had before them. There were twenty competitors and not more than two or three would seem to have been aware of this ideal. The glorified secondary schools and the inflated "Span" housing schemes far outnumbered the real college. Only one or two designs actually disgraced distinguished names; most of the schemes were deft in their handling of all the current clichés, in their glamorous landscapes and domestic detail. All but a few missed the main point.

* * *

A Cambridge college is neither a technical school nor a hostel. It is a place where men live together, no longer under any monastic rule, but in a male society—a society unified by a single transcendental idea.[1] As such the college has a certain mystique. As such it is neither a single monument nor a conglomeration of dwellings, or rather it is both. It is the only contribution which the English have ever made to the basic plan forms of European architecture. That basic plan was both the perfect expression of the collegiate community—i.e., the total group looking in upon itself and unified around a common court—and also the perfect expression of the individual, the "poor clerk"—i.e., the small single rooms around the staircase. This dual expression was heightened on the communal side by the larger units of hall, chapel or library; on the individual's side by the small domestic scale of the sets.[2] Historically, whether in the fifteenth or the eighteenth century, the two divergent scales were married by a common overall patina or texture—much as a common material marries divergent elements in a vernacular village. This overall texture was of three kinds: one, the smallest module of the mullion or Georgian pane; two, the larger module of the staircase bay; and three, the even larger module of the court itself. This might vary from the 320ft Great Court of Trinity to the little 80ft Gonville Court at Caius or 80ft Chapel Court at Pembroke. It was never so big as to cease to be a court and become a campus,[3] but being proportionate always to the surrounding buildings—Wren's rough rule that you could lie the buildings on their face without them touching—was never so small as to be a mere yard or light-well.

That basic collegiate plan—with all its interwoven diversity and unity—the English brought to perfection, embryonically in monasteries[4] and almshouses, and then more fully in the Inns of Court and at Oxford and Cambridge. That plan, like all plans which express their function both in form and scale, was functionally successful. In the course of time it also acquired charm and delight. That delight was not wholly a matter of sentiment or lovely decay. It was real, being based partly upon that unification of parts referred to, but partly also upon that variety or sense of surprise so inherent in all romantic design. The campus reveals itself at a glance; its merits are soon exhausted. The college, adding court to court, established a different basis—the constant change, the series of surprises that give delight on a progress through the entire college.

There is, however, a fourth and even larger scale than the court at which the college may function and give delight—the sum total of the conglomeration. One competitor in the Churchill competition has dismissed the older colleges as mere collections of the domestic architecture of the time. This is nonsense. They are a collection, but, unlike a street, not a *mere* collection. The unification around the courts, the progress from court to court, the larger communal units, etc., do combine to make each college complex a single thing, a single monument. This single monument may not be something the eye can take in at a glance, but no one can deny that Christ Church, Magdalen, Trinity, King's are not only collections of domestic architecture but are also felt, if not immediately seen, to be each an entity, a monument, in their own right—virtually remarkable memorials to the princes or prelates who founded them.

Then there is a fifth and even larger scale still—the university group, the fortuitous but high romanticism of Christ Church Meadow, the High or the Backs. That was where the college differed from the great isolated monastic group. It is, mysteriously almost, both a single monument *and* something intertwining itself with the town and with other colleges to form a larger totality than itself. Now this does—in the context of Churchill—raise a question: should any-

1. Theological and philosophical changes through the centuries need not hide the fact that this idea is still the search for Truth.

2. Note the tiny doors and two-light windows even in large courts. That is why Gibbs's Building, for all its formal merits, "tells its story" so much less well than a typical court; it would be just as good somewhere else.

3. Downing is an exception—an unfortunate one.

4. The monastery cloister, however, is not historically a precedent for the college court; it expresses *only* the community, not the individual within the community; *his* expression was appropriately a cell door in a passage. The university had not liberated the mind. The little Cistercian houses, as at St. Cross, are nearer to the college idea.

one ever have been asked to design a college, not *in* Cambridge, but in the fields outside it?[5] It was a denial before the competition began of the urban nature of a college. The only great medieval groups out in the fields were large abbeys which dominated their rural setting and spreadeagled buildings by means of great towers. The only great eighteenth-century groups out in the fields were palaces like Blenheim which created their own large and ordered landscapes. Churchill can have no such aids.[6]

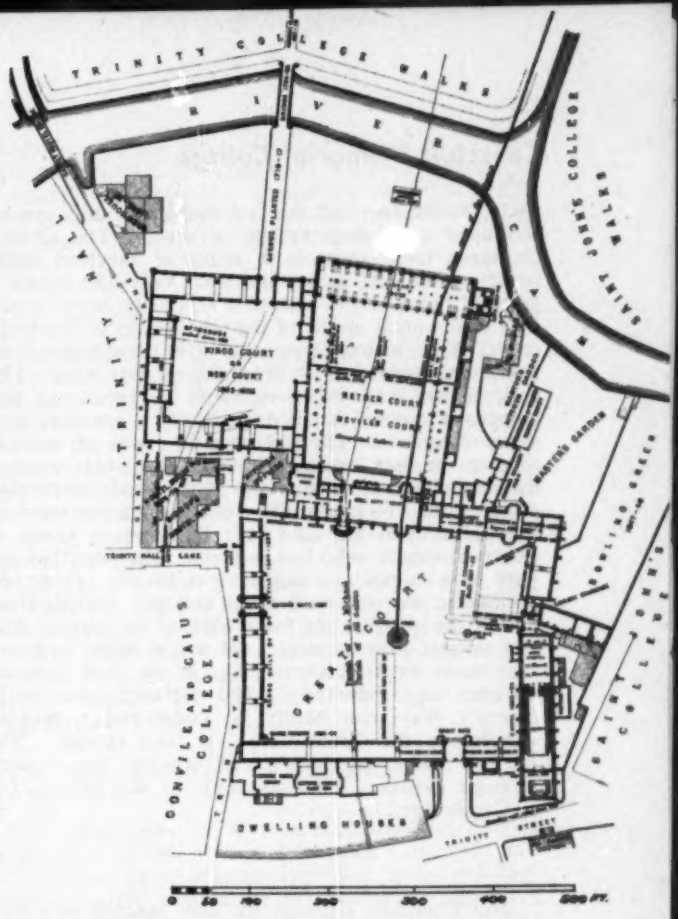
Thus by analysis do we arrive at our synthesis—emphatically not at any precedents for architectural form, but possibly at criteria for judgment.

* * *

The new college—as was indeed demanded by the Trustees—must be a single great monument to a great man; the whole must transcend the parts. The new college must house not only a number of individuals but a community, a community moreover which (unlike that in, say, a housing estate) shares an ideal. The new college must give full expression to the freedom and individuality of the person. The new college must, whether as a *coup d'oeil*, or as a complex through which one progresses, provide delight. All these things, though not all in equal degree, are achieved both in the Sheppard scheme and in the Howell scheme.

There are two more things the new college must do. One: unlike the fifteenth or eighteenth centuries the twentieth century is not an architectural epoch—its technological genius has run in other directions; its architects have been concerned for twenty years solely with perfecting the seemly, economical and rather ephemeral social building of schools and housing. This competition was unique and magnificent in that a number of brilliant but mainly inexperienced men were invited to show their paces in the hope of a "break-through" . . . a break-through to a new monumentality, to an architecture widely different from, but qualitatively analagous to, that of the great ages. Two: the new college had not only to look inwards upon its own courts; it had also to impose upon the western quarter of Cambridge the beginnings of a great romantic landscape such as could, in the course of a century, become the counterpart to the High or the Backs. These two tasks—the "break-through" and the external romantic landscape—were the most difficult assignments. Only the Howell scheme offered a solution. This scheme the assessors considered to be "of exceptional merit". They said that it was "distinctive, imaginative and completely consistent". They rejected it.

Howell and his partners were among the least experienced of the competitors. Their vision may be just the poetic vision of young men as yet unaware of how little the Establishment can really "take".[7] They also seem to be the only competitors neither haunted nor inhibited by their own schools, hostels, barbicans or new towns. In their "break-through" they have given a practical and developed realization to the fact that the "frame"—first expressed architecturally by Sullivan a century ago—has, after all, to be covered, and is therefore sounder when set behind the main surface, thus eliminating joints. The technology of the "break-through" is therefore a "skin" construction, on the grounds that neither the aeroplane nor the car any longer reveal their chassis. The skin, being expressed in the Howell scheme by a complicated series of facets and canted jambs, has led on logically to new methods of daylighting in rooms and to a new



external sculptural enrichment, no less justifiable than mullioned panels or pilasters and string-courses. The faceted enrichment springs indeed from both the room plans and the structure. It is novel, but it is developed with skill, the facets throughout being in good scale. The whole college in fact—unlike the others—has a noble and monumental scale and is presented with great conviction.

The Howell plan is rich and intricate in detail, but is dominated by only two major courts. These are polygonal—the canted sides being carefully related to vistas and to approaches. The visual and social functions of the historical court remain. The scale of each court is large but does not actually slip over into campus design, while the polygonal form—apart from avoiding the usual zig-zag walk in wet weather—is of course closely linked with the faceted walling, much [illegible]pendicular panelling is linked with square plan forms. The landscape is as bold in scale as the buildings. It speaks for itself. A lake has not merely been provided, as in the Sheppard scheme, it has been wound in among the buildings, some of which project over it. The ground of the main court is dished so that the lake is visible from everywhere. Here, then, was the beginning of the larger scale romantic landscape necessary as a compensation for the lack of an urban and university setting. This scheme goes far towards meeting all our criteria.

* * *

We turn to the Sheppard scheme. This has very great merits and seemed to the assessors to meet all the requirements which, in their report, they summarized rather bleakly. The key to this design is not any great concept—certainly not a "break-through"—but just an admirably planned living unit—bedroom,

5. What a pity that the trustees could not wait ten years for the Addenbrooke site.

6. Four hundred years ago when Cambridge itself was in a far more rural setting there was also less of it, and the cathedralic scale of King's Chapel must have given unity to the whole university.

7. Does anyone believe, for instance, that the sort of people who in this country might put up money for an opera house would—in this country—have accepted Utzon's Sydney design.

Churchill Memorial College

study, bathroom—and the fact that these units can be combined in a great variety of ways.[8] The scheme combines these units in a series of nineteen small courts—some 65ft across and some only 45ft across—grouped in a phalanx around a very large centre court. One of the great merits of the scheme lies in this large court. True, it is so large as to be in the campus class, but is so designed as to draw the campus sting. The hall, library and other elements so break up this campus into parts that it does, in effect, act more as a series of courts. The changes, the sense of surprise inherent in such courts, is there. The whole campus cannot be seen at once. It is of the small courts that criticism may be made. The smallest are too small in themselves[9] and are used only by those—a group of twenty students—who live in them. They are thus not part of a complex giving delight to all. They add nothing to the sum total of the college. Neither from within the campus nor from without the college does one suspect their existence. It would seem, however, that these smaller courts may, in the final scheme, develop very differently. The entrance, too, on to Storey's Way, can hardly be considered a modern parallel to the Great Gate. It may change. The porter's lodge in the Howell scheme has a most strategic position relatively both to the college and to Cambridge.

* * *

The Churchill Trustees are now assured of a very good architect, probably of a very good college. They could have had a great college. Was there a failure of courage? Did one or two of the drier academic minds sense a touch of vulgarity? Or was it really a matter of cost?

The competitors were told that the "assessors have in mind a target cost of £1,100,000," but that this would be reviewed. That five assessors, four of them dons, should use this piece of loose jargon—"target cost"—in a document that should be almost legalistically precise is dumbfounding. The phrase can be and has been interpreted in many ways.[10] It can hardly be called an instruction. Churchill College is not a technical school or provincial town hall to be built out of the rates. The whole purpose of the competition has been invalidated.

Sheppard's quantity surveyors estimated the cost of his scheme at £1,155,250. Howell's surveyors estimated his at £1,319,700. The difference is accounted for by a higher rating (10s per sq ft) in Howell's case, and also by the addition of an admitted luxury—a cloister. The area of this cloister is precisely the area by which the Howell scheme exceeds the Sheppard scheme. This accounts for 40,000 sq ft or £160,000, the difference between the two schemes. The Howell scheme was criticized by the assessors for being 25 per cent over the area of the most economical of the four final schemes (Chamberlin, Powell & Bon's) but this in turn was criticized for having undersized rooms.

This is to be a monument to Winston Churchill. Two hundred and fifty years ago the nation built a monument to his ancestor, the Duke of Marlborough. Doubtless Nicholas Hawksmoor could have been prevailed upon to build a cheaper and more sensible palace than did John Vanbrugh. But what a pity if he had.

8. What is the point of making a repetitive unit of something which cannot be seen to repeat and which cannot be prefabricated?

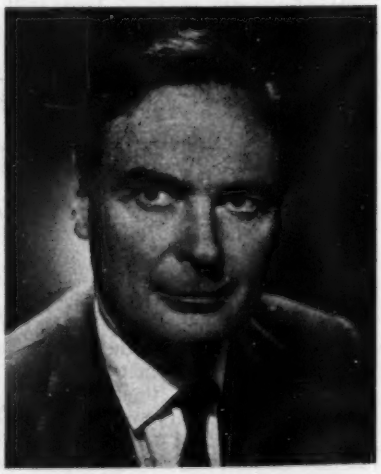
C. D. Spragg, C.B.E., who retired from the secretaryship of the R.I.B.A. on July 31, with his sister, Mrs. Fidler at the R.I.B.A.'s cocktail party in his honour

Churchill College Competition Background

The competition, which was set in two stages, invited twenty-one firms of architects to prepare sketches to a scale of 1/32. Four of these entrants were invited to proceed to the second stage, each receiving a premium of £500. The winners, who have been appointed architects for the college, are Richard Sheppard, Robson & Partners. The other three firms in the second stage were: Howell, Killick & Partridge; Stirling & Gowan; and Chamberlin, Powell & Bon. The other firms who entered the first stage: Architects' Co-Partnership; Sir Hugh Casson & Neville Conder; Yorke, Rosenberg & Mardall; Fry, Drew, Drake & Lasdun; Frederick Gibberd; Erno Goldfinger; Lyons, Israel & Ellis; Robert Matthew & Johnson-Marshall; Powell & Moya; David Wyn Roberts; Taylor & Green; Alison & Peter Smithson; The Hon. Lionel Brett; Norman & Dawbarn; H. T. Cadbury-Brown; and James Cubitt & Partners.

The assessors: Sir John Cockroft, Master of the College; Mr. Noel Annan, Provost of King's; Mr. Basil Spence, A.R.A., P.R.I.B.A.; Sir William Holford, F.R.I.B.A.; and Sir Leslie Martin, F.R.I.B.A.

Next week, the designs of Stirling & Gowan, and Chamberlin, Powell & Bon will be published, and the following week other schemes of interest from the first stage.



Mr. Richard Llewelyn Davies, new professor of the Bartlett School

9. About half the size of Gonville Court.
10. There is, for instance, a lot of targets outside the bull's-eye.

EVENTS AND COMMENTS

BEGIN THIS EXCITING SERIAL NOW

The story so far: Abner, a wicked architectural columnist, has been thrown out of work by a dispute in the printing industry. Hungry and tired through tramping the streets in search of work, he spends his last coppers on an evening paper and reads that the presses are running again. Shambling home, he is unable to open his front door for the letters containing reports of architectural goings on sent him by his editor. His ink has dried up in the hot weather, his pen is full of earwigs and his writing pad has been stolen for the mass production of paper boats. With trembling hands he opens the mail. *Now read on.*

CHINESE ARCHITECTURE

The exhibition of Chinese architecture, held at the R.I.B.A. from July 8 to 31, was full of interest, mainly because of the large number of old buildings included. There were examples of palaces, parks and gardens, religious architecture and bridges. For the most part the photographs were excellent and gave a very good impression of the richness and variety of the buildings and landscaping. It was not possible to see the state of maintenance of most of the buildings, but it occurred to me that the cost of their upkeep and restoration must be colossal, and I wondered what kind of priority was given to this work in China's vast programme of building. Probably the most remarkable structure in the exhibition was the Anji Bridge, a single stone span of over a hundred feet, built about 1,300 years ago. A visitor to the R.I.B.A. asked the Dean of Canterbury whether he supposed that any metal cramps had been used in the construction. The Dean, fixing the inquirer with a gimlet eye, with his eyebrows raised in condescending astonishment, said but one word—"ferro-concrete".

The modern architecture was not distinguished and wavered between Wembley Exhibition 1924, and Stalin Allee, Berlin 1949, or wherever it was. Some of the industrial installations however were well arranged. A leaflet included in the catalogue spoke of the great task of reconstruction and development facing China, but apart from slogans, the exhibition did not manage to convey the sense of mass production and urgency which must be the most impressive aspect of Chinese architecture today. I thought the inclusion of pictures of buildings in Lhasa fine, though this was in the worst possible taste. To mark the event the usual refreshments were augmented by delicious Chinese food and raisin wine.

BECAUSE of the recent stoppage in the printing industry, publication of "The Architect and Building News" was suspended after the issue of June 24. The present number, which commences Vol. 216, is, therefore, the first for six weeks. We regret the inconvenience caused by this break in continuity, but in our Events and Comments, and News, we shall record in this, and the next issue, events of importance which have occurred during the period of non-publication. Feature articles, which would have appeared in the past weeks, will be published in future issues, along with new products and other regular features.

Current subscriptions will be adjusted by postponing the renewal date for the period of the stoppage.

BILL SPRAGG

Although Mr. C. D. Spragg did not officially retire as Secretary R.I.B.A. until July 31, a meeting was held at 66 Portland Place on July 7, at which he was presented with a gold watch and a handsome cheque to mark his 46 years' faithful service to the profession. Mr. Spragg's sister, Mrs. Fidler, also received a gold watch. The ceremony was admirable, simple, and was unspoiled either by board-room sentimentality or boring reminiscence. Mr. Spragg's own speech, I suppose his first in that room, of more than a hundred words, was a model. The meeting, which was well attended, was followed by a very gay party at which the champagne flowed, like the old time R.I.B.A. reception cider cup. Very little blotting paper was provided with the result that Portland Place echoed and re-echoed to the farewells of old friends as the party broke up.

NEW PROFESSOR FOR THE BARTLETT

The appointment of Mr. Richard Llewelyn Davies to the chair of architecture of London University will be welcomed by all who are interested on the development of modern architecture in this country. He takes up his appointment in October 1960 and therefore has plenty of time to make his plans. Everyone is asking what he will do. Architectural Education is as usual at the crossroads. The Oxford Conference has passed into history and some of its more easily adopted recommendations have been put into effect here and there. Young and lively professors are in the chair at Cambridge, Liverpool and Edinburgh. The Architectural Association, changing its mind from time to time, is still flirting with the College of Building, although the flirtation seems somewhat one-sided at the moment. This does not mean that work has stopped in the school. The Architectural Association thrives on upheavals and this year's exhibition of student's work was the most imaginative and best presented for some time. The Principal's address at the annual prize-giving dealt at length with the advantages of the College of Building and caused, I hear, some Council members' eyebrows to quiver. Elsewhere more schools of architecture have received recognition from the R.I.B.A. The building industry prospers and there is a shortage of bricks which assurances from the M.o.W. have done little to cure.—Mr. Molson has had an unhappy year, first through illness and now as the result of a motor accident. We wish him a speedy recovery.—This then is the setting for Mr. Llewelyn Davies' planning for the Bartlett. Well known for his work at the Nuffield Foundation he is not personally very well known and is seldom seen at architectural gatherings. He is something of an architectural back-room boy. According to *The Times* he describes his main aims as trying to bring architecture into closer touch with developments in the natural and social sciences, and developing research and post-graduate teaching in architecture. My guess is that the new professor will go in for a plan of quiet re-organization with little publicity and no fireworks.

A new Automobile Association service station

ROADSIDE HORROR

My picture shows one of a new series of shacks being erected alongside Automobile Association's telephone boxes at various points on main roads as service and information centres. It is a poor thing with clumsily applied lettering, and, planted alongside the hideous standard telephone box makes one more abominable blot on our cluttered roads. We are all grateful for the Automobile Association's service, indeed many of us are members and everyone is as familiar with the badge as he is with his own front door. Why then must this erection be plastered with it? It is high time that this important motoring organization took note of good design and followed the lead of the great oil companies. It should put these excrescences in the horrid litter bins provided and consult the other A.A.

CHARTERED TOWN PLANNERS

Her Majesty the Queen has graciously approved the grant of a Royal Charter to the Town Planning Institute. The architectural profession will be unanimous in congratulating the President, Mr. U. Aylmer Coates and his Institute. The granting of a Charter is a recognition of the status of the Institute and of the work of its members.

B.B.C. BUILDING MATTERS

An important step in the improvement of information in the building industry generally will be taken on September 29 when the first weekly edition of the new B.B.C. Network Three programme, "Building Matters" is to be broadcast. The programme is intended for the industry and is planned to be both practical and informative. The producer is Bob Gunnell who is working closely with an advisory panel consisting of Mr. Edward Mills, architect in private practice, Mr. Gontran Goulden, deputy director and chief technical officer of the Building Centre, Mr. K. Alsop, personal assistant to the Director of Building Research, and Mr. William Bryant, Professor of the N.F.B.T.E. The compère of the programme will be Mr. Charles Creighton, who before he joined Holliday & Greenwood, the London contracting firm of which he is a director, was an architect. He is a particularly good choice for the part as he not only combines knowledge of both sides of the industry but has considerable experience of both the theatre and broadcasting, quite apart from his experience as an architectural journalist on the staff of the A. & B.N. before and after the war. Inquiries arising out of these programmes will be dealt with by the Building Centres in London, Glasgow and Bristol.

NEW OFFICE FURNITURE

Prototypes of commended designs in the Timber Development Association's competition for wooden, or mainly wooden, office furniture were shown during July at the Building Centre. They were in the main respectable but dull and I was not surprised to find that the jury had withheld the first prizes and divided them as special awards. For some reason few of our top designers entered and this may account for the disappointing results. However, the exhibition caused quite a lot of interest. For fear of giving a wrong impression let me say quickly that almost all the designs were a great deal better than the type of furniture one usually finds in the offices of business executives. The disappointment lay in the lack of innovation and ideas. I think it was Kaare Klint who, when asked what he had been doing for the last seven or more years replied, "designing a chair". The furniture in this exhibition was not on that level. Only one exhibit used plywood in any great quantity and although the designer was ingenious I felt that Alvar Aalto had done it better twenty-five years ago. Although the results did not achieve the excellence of design hoped for, the competition was worthwhile and it is very much to be hoped that the mass producers of "executives" and other office furniture will have been influenced by it.

Z.D.A. COMPETITION

The Zinc Development Association is holding a competition for improvements in the design and methods of fixing and joining eaves gutters fabricated from sheet zinc. Prices of £75 and £25 are offered and the competition is open to almost everyone. At first glance it is difficult to see how anyone is going to make much of an advance on a half round gutter, but there may be some ingenious chaps about with ideas for better brackets and joints. This competition provides a good opportunity for joint architect-plumber entries. Closing date, September 30, 1959.

MR. H. S. GOODHART RENDEL

The death of Mr. Goodhart Rendel removes one of the few remaining architectural "swells". He was a man of extraordinarily wide knowledge and interests as is illustrated by the fact that, in addition to being a past president of the R.I.B.A.—and the A.A.—he held an Oxford degree in Music, was vice-president of the Royal Academy of Music, served in the Grenadier Guards in both wars and wrote *The Squad Drill Primer*. He had been Head of the A.A. School and Slade Professor at Oxford. All this came after a degree at Cambridge.

His lectures and broadcasts were outstanding for their display of knowledge, their wit and their elegance, no matter whether the subject was Victorian Architects or Musical Comedy.

Mr. Goodhart Rendel's architecture was not easy to like. *The Times* pointed out that his churches were his most successful works and went on to describe his great scheme for Prinknash Abbey as an essay in "stripped gothic", all his work had an individual stamp. Apart from Prinknash his best known works are St. Wilfrid's Church, Brighton, and Hay's Wharf, London. His portrait by Augustus John is the most distinguished painting in the R.I.B.A.'s gallery of past presidents and an excellent likeness as well.

ABNER

NEWS

Corby Civic Centre Competition

One hundred and eighty inquiries had been received at the beginning of July for the Corby civic centre architectural competition which was noted briefly in the A. & B.N. for May 27. Edward Mills is the assessor: premiums are: £1,000, £750 and £500; the closing date for entries is noon, Monday, December 21. Full details are obtainable from the Clerk to the Council, Council Offices, Corby, Northants. (July 3.)

Competition for County Offices, Taunton

Somerset County Council invite architects registered under the Architects Registration Acts, and resident in Great Britain and Northern Ireland, to submit designs in competition for proposed new County Offices to be erected on a site at Taunton. Assessors: The Hon Lionel Brett, F.R.I.B.A., Geoffrey Jellicoe, F.R.I.B.A., and J. M. Richards, A.R.I.B.A. Premiums: £1,500, £1,000, £500. Last day for submitting designs: 5.30 p.m. on Monday, February 15, 1960. Last day for questions. September 22, 1959. Conditions may be obtained on application to the Clerk of the County Council, County Hall, Taunton, Somerset. Deposit: £2 2s. An applicant for the conditions must state his registration number.

A.R.C.U.K. Scholarships for Professional Practice in 1960

Grants of up to £800, plus fees, may be made to enable British students to complete their qualification for registration as architects by examination in professional practice and practical experience, starting in 1960. This scheme of maintenance scholarships for special studies in architecture has been approved by the Architects Registration Council of the United Kingdom, 68 Portland Place, London, W.1.

Industrial Art Bursaries Competition

Travelling bursaries to the total value of £4,300—£1,000 more than last year—are offered by the Royal Society of Arts in its industrial art bursaries competition for 1959. The competition is open to students attending an art, architectural or technical college, and to other young designers who intend to take up industrial design as a career. The design sections range from domestic electrical appliances to typography and include six bursaries for furniture design and three for film and television settings. The closing date for entries is October 12. Full details are obtainable from the Bursaries Officer, Royal Society of Arts, John Adam Street, Adelphi, London, W.C.2.

Teething Troubles of the New R.I.B.A. Constitution

Some members of the R.I.B.A. are uneasy about the effects of certain provisions of the new Constitution, according to the president, Basil Spence, at his Press conference on Wednesday, July 8, following the Royal Institute's Council meeting. For example, Mr. Jefferiss Mathews was ineligible to stand for office as honorary treasurer, because he had not been elected to the new council by vote. His colleagues were most regretful that he was unable to finish the job he had started and to take credit for the improved position in the R.I.B.A.'s finances. The president said that some felt the democratic ideal was going too far. The council was debarred from using the services of a good man by the crippling rules of the new constitution's clauses 1-9, now accepted. Two main points were made in council by Mr. Norman Fowler, chairman of the Allied Societies' Conference: First on the understanding that Allied Societies' councils were elected by democratic procedure approved by the R.I.B.A., they should be left to select their representative to the Royal Institute's Council by whatever means they wished.

Proposed 23-storey hotel in Park Lane, which will contain 506 bedrooms. The site is bounded by Hertford Street, Stanhope Row, and Pitts Head Mews

Proposed new station for London Road, Manchester, with adjacent offices. The project will take three years to complete

Aerial view of the boundaries and surrounding buildings of the site for Corby Civic Centre Competition

Secondly, Mr. Fowler suggested that the proportion of nationally elected to regionally elected members of the Council should be one-third to two-thirds.

The block grant by the R.I.B.A. to Allied Societies and automatic membership of an Allied Society were other grumbles. Some large Allied Societies expect a larger influx of membership under the new rule: will they have enough money and the staff to meet their new commitments?

A.A. Affairs

The prospects of a College of Architecture and Building which, as discussed in our leader article of June 17, had come under a cloud, became brighter during a recent council meeting of the Architectural Association. The A.A. Council met on June 8 and rescinded the motion which had been passed at a special general meeting on April 10. The motion: "That the A.A. should not continue negotiations for a College of Architectural and Building if this involved association with the London County Council", was rescinded by ten votes to three, one member abstaining and four members absent (two of whom were signatories to the motion). As a result, a letter has been sent to the L.C.C. informing them of the council's decision and asking permission to publish details of the previous negotiations in connection with this protest, in order that they might be presented to the association's members and their views obtained by means of a special general meeting followed by a referendum. A copy of this letter was sent to the Ministry of Education. The L.C.C. has replied to the A.A. council that it is not yet in a position to give permission for details of the negotiations to be published.

In his speech at the A.A. prize-giving ceremony, at which Mr. Cadbury-Brown presented the prizes, Mr. Michael Patrick, principal of the A.A., had this to say: "As this proposal for a new college is by far the most important issue which the A.A. has had to decide in the last fifty years, I feel that it is only right that you should know, however briefly, what my own personal opinion is.

Frankly, I am wholeheartedly in favour of the scheme. I think there is no doubt that the possibilities for improving our educational standards are far greater in a college of advanced technology than they could ever be by preserving a sort of haughty independence—an independence, incidentally, which is largely illusory, as there are few things more restricting than an acute lack of money. But, quite apart from the financial aspect, there are educational benefits which should not be overlooked.

First, there is a greater opportunity to further the students' general education by degree courses as opposed to the ordinary diploma course. Secondly, the residential requirement for students in every faculty must surely produce some understanding and sympathy between the architect, builder and engineer. Thirdly, the centralization of all the techniques of building within one college would surely produce an environment where post-graduate research could be made to play an important and realistic part.

I feel that, in opposition to the scheme too much has been made of the association's loss of control over its school. Speaking from personal experience, there has never been much control. What there has been, and for this we are eternally grateful, is the steady and unwavering help we got from the council and from a vast number of visiting members."

Coming Events

The Design Centre

August 17 to September 12. "Terylene—a British Achievement." At 28 Haymarket, S.W.1.

Town Planning Institute

August 27 to September 2. Town and Country Planning Summer School at Southampton University. Cost: Residential accommodation £12 12. Non-residents £4 4s.

September 2 to 5. Overseas Section. Residential £8 8s. Non-residents £4 4s. Applications to the Secretary, 18 Ashley Place, S.W.1.

Law and Administration

Town and Country Planning

One of the most useful and well-written documents to come from the Ministry of Housing for a good while appeared in June. Entitled *Selected Planning Appeals*, this publication is a new series of published decisions, and called the second series, but with a considerable difference. For the very first time some real effort has been made to produce a useful, understandable and helpful booklet of decisions. These new decisions go a good deal further, because five of the sections in the booklet are prefaced by a clear and rigorously worded statement of the Ministry's general policy in the field concerned. Commending the new booklet in *Circular 40/59* emphasis is laid on the fact that

"The Minister is extremely anxious to reduce the total number of appeals, if that can be done without in any way derogating from the right of appeal. He believes that many of the appeals might never be made if the authority would take more trouble to explain to the applicant the policy which underlies their decision, or (where agreement seems possible if the proposal were to be modified) the changes which they suggest and the reasons for suggesting them. He hopes that the publication of these selected appeals, and in particular the statements of general policy, may help authorities to play their part in recovering the number of cases which come to appeal, both by warning them from taking a line which the Minister is unlikely to support, and by enabling them to see that applicants have all the relevant information where it seems unlikely that an appeal would have any chance of success."

If the new publication is to be a simplifying factor in the planning world another recent publication is certain to have entirely the opposite effect. On July 16 the *Town and Country Planning Act, 1959*, received the Royal Assent. The general complexity of the new Act has been much enhanced by a positive flood of belated amendments, many very substantial, tabled by the Government both at a very late stage in the House of Lords and again in almost equal measure when the House of Commons were considering the House of Lords' amendments. The net result has been that the Act in its last stages became almost one third longer than before. The Act is to be separately considered in a later issue.

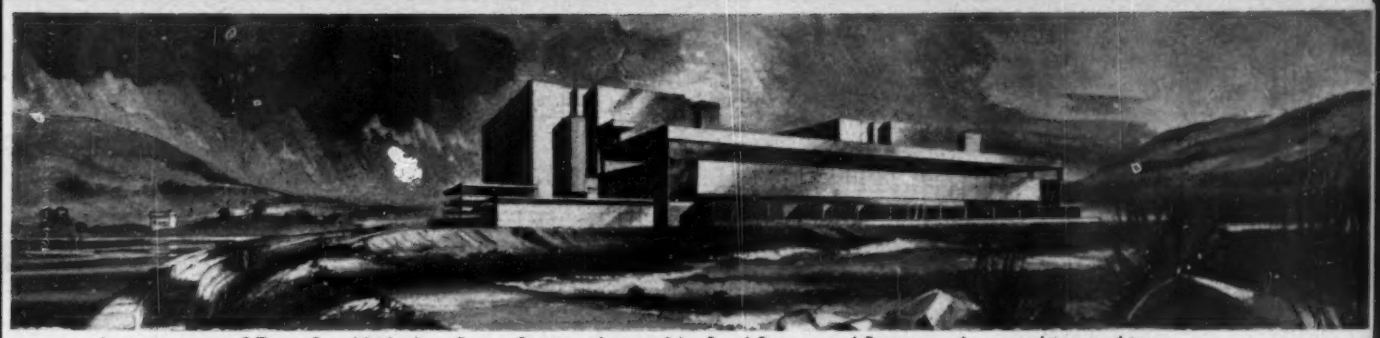
Two more plans have recently been approved. The *Leicestershire* Development Plan was approved by the Minister of Housing and Local Government on July 17. He also approved in June the National Parks Commission's proposal for a long-distance footpath, 93 miles in length, along the south coast of Devon.

The path will run from the boundary of Devon and Dorset at Lyme Regis to the terminal of the Plymouth ferry at Turnchapel. The path will link up with the Cornwall south coast footpath which the Minister approved in 1955.

Housing

It was the intention of the Government's House-Purchase scheme that as soon as the enabling legislation was passed money should be lent by the Exchequer to certain building societies to enable them in turn to lend to purchasers of certain older houses. Consequently under the *House Purchase and Housing Act, 1959*, Regulations have been made laying down the requirements which must be met before a society becomes eligible for Exchequer loans under that Act. These regulations are *The Building Societies (Designation for Trustee Investment) Regulaitons, 1959*, and came into operation on June 14, 1959.

The enactment of the Housing (Underground Rooms) Act, 1959, was reported on June 10, 1959, page 741. The effect of the Act was to restore to local authorities their powers to close underground rooms under the provisions of Section 18 of the Housing Act, 1957. One Act of 1957 and its predecessors allowed the local authority



An impression of Trawsfynydd Nuclear Power Station, designed by Basil Spence and Partners, the consulting architects

to make regulations regarding underground rooms, and many such regulations have been made in the past. In *Circular 38/59* issued by the Ministry of Housing at the end of June and dealing with the Underground Rooms Act it is pointed out that

"The Minister will also be prepared to consider any new regulations which authorities may wish to make. Before giving his consent he will, as in the past, ask them to advertise the draft regulations and allow opportunity for inspection and comment.

"The existing *model* regulations have been revised to bring them into conformity with present-day standards. Local authorities with regulations already approved are asked to obtain a copy of this revised model, to review their own regulations in the light of it and to submit revised regulations not later than the end of the year." Copies of the model regulations can be obtained from the Ministry's offices in Whitehall, or Cathay's Park in Cardiff.

House Demolition

There have been several occasions recently on which the Government, particularly the Minister of Housing and Local Government, have been urged to take legislative action to control the behaviour of local authorities.

The Minister refers to one such matter in Circular 41/49 which deals with slum clearance.

"It has recently been brought to the Minister's notice that some local authorities acquiring unfit houses compulsorily for the purpose of demolition and redevelopment take possession well before they are ready to rehouse the tenants and demolish the houses, *collecting the rents during this interval.*"

The Minister observes that he has been asked to legislate against this practice, reminding local authorities that they have "A statutory duty to cause houses to be vacated "so soon as may be" and to secure their demolition. In the Minister's opinion it is wrong that they should take over the houses before they need to do so for the purpose for which they have bought them, unless there are special circumstances justifying this".

The Circular goes on to say that the Minister hopes that legislation will prove to be unnecessary because local authorities will end the practice.

Taking Possession

By way of guidance the Minister indicates the stage and manner in which he considers possession of unfit houses can and should be obtained.

"Once notice of entry has been served . . . the local authority have the *right* to enter and take possession at any time after the expiry of the period allowed by the notice, which must not be less than fourteen days. They are thus able to secure the vacation of the premises whenever they need to do so, and can defer action under the notice of entry until they are in a position to demolish."

The Minister records that many authorities find this procedure satisfactory and often send with the notice of entry an explanatory letter to the landlord. An example of such a letter in a form used at present is printed in an Appendix to the Circular.

The position is, of course, quite different where a local authority act under Section 48 of the Housing Act, 1957. This arises normally where a local authority, faced with a very large housing problem recognizes certain houses to be unfit but wishes to retain them in use if they can be rendered "adequate for the time being". But as the Minister points out this presupposes normally that the local authority intend to repair and improve the houses when they have acquired them.

"Provided that they have made clear this intention in advance and the owners have had an opportunity to state their objections, if any, it is reasonable and in some ways an "advantage that, where the Minister decides to confirm an Order, acquisition should be completed quickly and the local authority assume full responsibility as soon as possible. In fairness to owners, the local authority should, however, make sure that, in informing them of the proposal to acquire, reference is made to any plans for deferred demolition".

Compensation

The mean-spirited approach of a few local authorities has often been responsible for much opposition to their plans which otherwise might never arise. Not all forms of statutory compensation can be precisely regulated and the Minister of Housing draws attention to an example of this and of the need for a reasonable attitude to compensation in his *Circular 41/59* mentioned above. In an earlier Circular, 43/56, the Minister drew the attention of authorities to the case where people were carrying on business premises found to be unfit under the Housing Acts, and who were only tenants for a year or less. As such they are not entitled, directly, to compensation for loss of business interests. But authorities under Sections 32 and 63 are given a discretion to make payments to cover the losses of such persons, and as the Minister points out they are normally expected to consider the use of such powers.

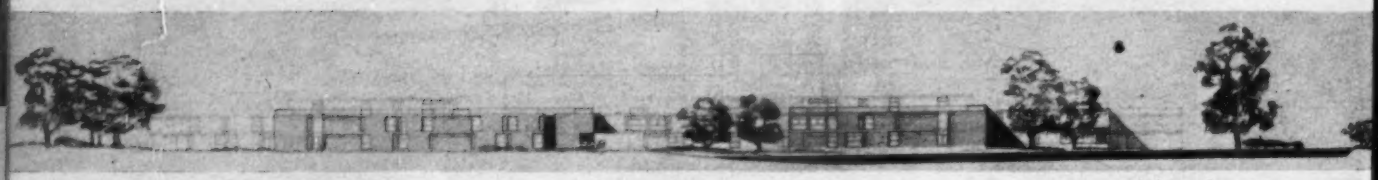
"While a number of authorities make full use of their discretionary powers, complaints continue to be received that not all local authorities do so, and that some have decided to refrain altogether from the exercise of their discretion on the grounds that, if they were to make an allowance in any particular case, they would have to do so in many more."

In the Minister's view, this is to misconceive the purpose for which these discretionary powers were given. The reason why they are discretionary and not mandatory is because of the difficulties of providing for any statutory scheme of compensation to meet the varying circumstances of this kind of business tenant.

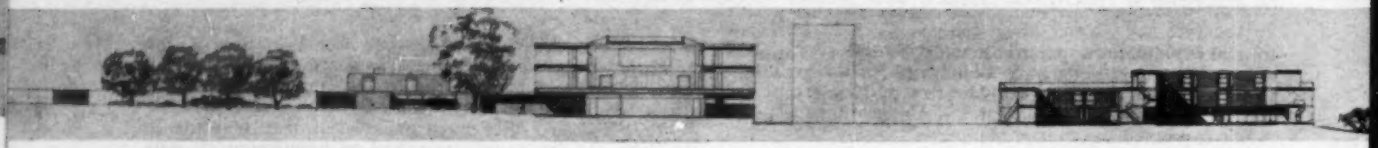
The Circular ends by urging local authorities to make full and intelligent use of their discretionary powers to meet cases of hardship and loss which arise in this way under slum clearance schemes.

Smoke Control

In future furnaces fired by mechanical stokers will be acceptable in smoke control areas where the stoker was installed from 1957 onwards. This exemption, proposed by *The Smoke Control Areas (Exempted Fireplaces) Order, 1959*, is conditional on the proper installation, maintenance and operation of the mechanical stoker so that it minimises the emission of smoke. It is also a condition of the exemption that only fuel of the type for which the mechanical stoker was designed be used. It should be noted however that furnaces fired by pulverised fuel are not included in the exemption. For guidance on suitable fuels the Ministry of Housing in Circular 44/59 dealing with the order refers to *"Firing Equipment and their Fuels"* published in two sections by the *Combustion Engineering Association*, 70 Jermyn Street, London, S.W.1.



West elevation



Section F/F [See page 12]

CHURCHILL COLLEGE COMPETITION

Assessors' Report

THIS competition has been assessed in two stages. At the first stage we examined schemes by twenty competitors: the drawings submitted were presented to a small scale and were intended to illustrate in a general way the competitors' ideas. In this preliminary assessment we selected four schemes for further development and for final judgment. The four finalists were asked to work out their schemes to a larger scale and to submit a report and accurate estimates of costs.

These four schemes offered very different solutions to the problem. But each scheme seemed to us to combine in varying degrees a good architectural conception, the possibility of producing an interesting and workable college building and a satisfactory answer to the requirements set out in the programme. The main difficulty in our final assessment has been one of giving a balanced consideration to these matters whilst judging schemes differing from each other so widely. We have, however, at this stage had the advantage of studying the larger scale drawings, the competitors' descriptive reports, their specifications of materials and their estimates of costs. We have also considered estimates of each scheme prepared by an independent quantity surveyor on the basis of approximate bills of quantities.

We consider that a satisfactory building for Churchill College has the following requirements: (1) It should be a distinguished design both in its conception and finish. (2) It should clearly be identifiable as a group of buildings for a college community. (3) It should establish by its planning and grouping an environment and framework in which a college community can naturally flourish. (4) It should be capable of being developed in self-contained stages and each stage should be a satisfactory entity. (5) It should be capable of being built at a figure close to the target cost, i.e., £1,100,000.

Winning Scheme

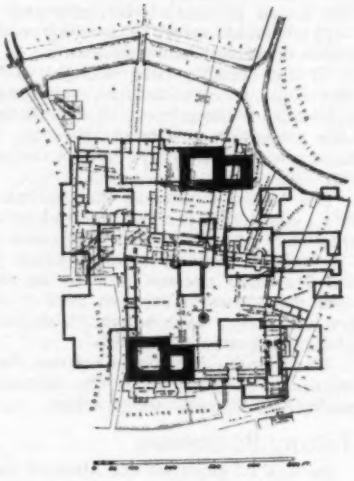
This scheme seems to us to meet all these requirements. The scheme presents an interesting variant of the traditional college plan. Large areas of lawn and paving, which correspond to the typical college courts and in which the main college buildings stand, are enclosed by the residential accommodation, which is itself grouped around a series of smaller courts.

These courts form sheltered and enclosed gardens surrounded by sets. Each group of rooms or sets would be identified not merely by its staircase, but by the courts themselves. The courts (either 65 or 45 feet square) vary in height between two and three storeys and would have individuality and diversity of treatment. A system of cloisters on three sides of each court provides a covered system of circulation.

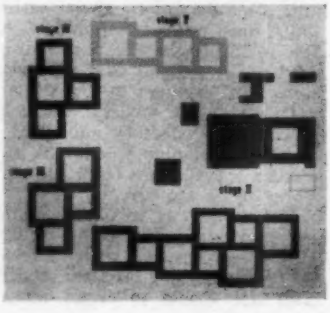
The rooms and sets surrounding the courts are well planned; the staircase access at the corners of the courts is an excellent arrangement. The plans of rooms achieve an interesting variety in the form of the sets, and a number of these have double height. The courts themselves will provide pleasant and secluded outdoor areas for undergraduates.

The central court area is therefore enclosed by a peripheral wall of residential accommodation. In this central space the library (including the Bracken Reading Room) and the main hall block are planned as two free-standing buildings. In the main hall block the hall and common rooms are placed at first-floor level and the space below these forms a natural focus and gathering place for undergraduates. The kitchen, stores and administration are connected

Below, a plan comparison is made between Trinity College and the winning scheme to help in assessing scale. This may be compared with the plan and perspective published on pages 2 and 3



Erection phasing plan



SCHEME BY RICHARD SHEPPARD, ROBSON AND PARTNERS

with this block and have their own service yard. The master's and tutor's houses are very well placed with regard to both privacy and connection with the college. The married quarters, in which nineteen flats are provided and which are placed on the higher ground at the north-west corner of the ground, are well sited, and skilfully planned so as to provide privacy for each flat.

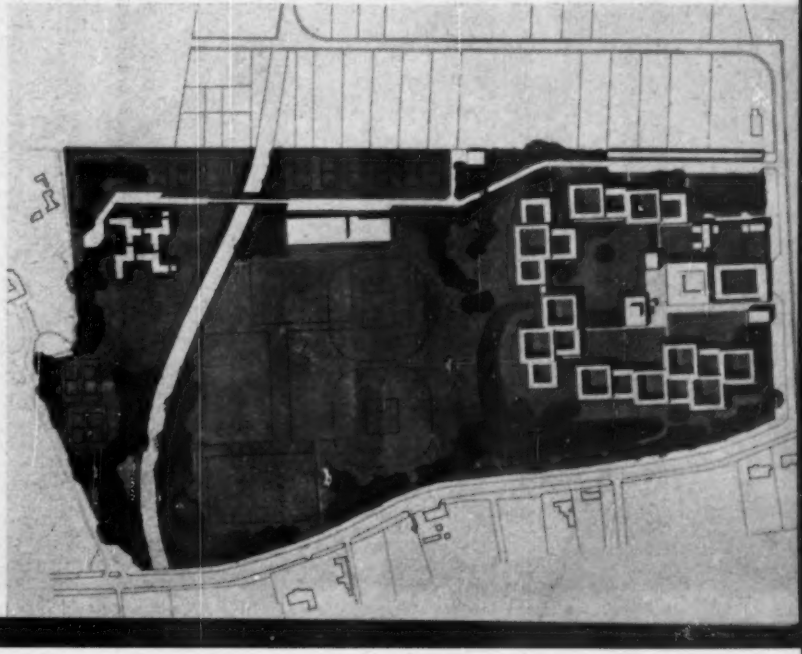
This is a scheme which showed promise in its original form and has justified itself in the second stage. It will almost certainly improve further, when the programme of the second and subsequent building stages are further defined in consultation with the building committee. The hall, for example, requires some replanning. Within the volume of accommodation allowed for, improvements could be made in the access to the hall, the natural lighting and the disposition of the surrounding small rooms. The areas of rooms correspond closely to those required by the programme.

The cost of the scheme as estimated includes 25 extra rooms. If these were omitted and some slight modifications were made to the specifications the cost could be brought close to the target figure. We do not consider that it is necessary to face the residential buildings in stone.

The brick facing proposed in the report should look well.

Main Analysis	£	Area ft.s.	Cost ft.s.	Cube	Cost c.ft.
Small flats ..	75,000	20,768	72/2¾	258,196	5/9½
Residential Acc.	803,500	199,492	80/6¾	2,494,151	6/5½
Dining and common rooms	116,500	16,731	139/3½	338,901	6/10¼
Chapel	9,000	1,416	127/1½	30,500	5/10¾
Libraries ..	31,000	3,508	176/8¾	64,628	9/7
Administration	59,000	13,166	89/7¼	182,072	6/5½
Guest Accom...	12,000	2,826	84/11	45,192	5/3½
Master's Lodge	16,000	4,075	78/6½	60,300	5/3½
Tutor's Lodge..	10,500	2,852	73/7½	40,000	5/3
Porter's Lodge	16,750	6,981	47/11¾	111,294	3/-
Garages ..	6,000	4,500	26/8	58,500	2/0½
Totals	1,155,250	276,315	83/7½	3,683,734	6/3½

Additional cost of perimeter planting £10,000 and car parking and cycle facilities £8,000. Total cost £1,173,250.



SCHEME BY RICHARD SHEPPARD, ROBSON AND PARTNERS

Extracts from the Competitors' Report

One of the most difficult problems to overcome in the design of Churchill College is the large number of men who will "live in". This has been overcome by placing the accommodation in a series of standard courts in two sizes, themselves arranged to include the larger spaces.

The large courts are 65ft square, and small courts 45ft square. The basic residential "unit" is L-shaped with study bedrooms and sets as two arms, and a core of sanitary and ancilliary accommodation (page 15). These units are based on a staircase access plan, with a maximum height of three floors around large courts and two storeys around the smaller courts. Each study bedroom is a maximum of 165 sq ft exclusive of built-in furniture, with a standard width of 9ft 6in. Sets are a minimum area of 235 sq ft, exclusive of storage space. A separate bedroom of 70 sq ft opens off the study.

Halls and Library

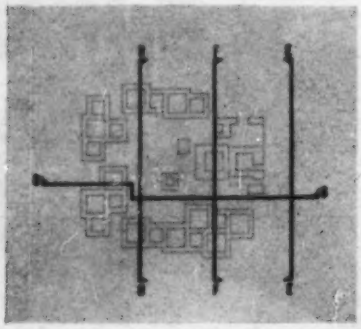
Dining halls are planned on the first floor so that students have a congregating place below on a covered concourse.

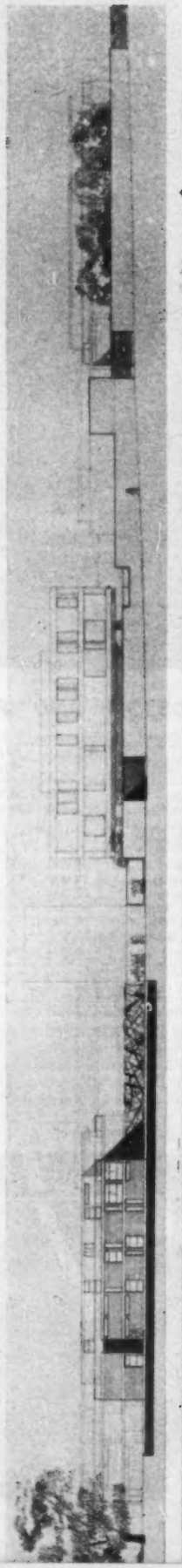
The Bracken Library is placed on the ground floor and can be seen from any part of the college.

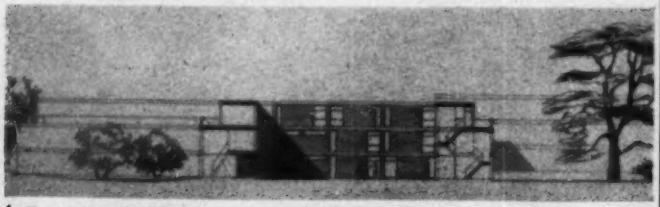
Memorials

Inside the college, visible through a screen which separates the entrance quadrangle and Storey's Way, a group of figures carved in relief and more than life size will stand as a memorial group. When the chapel is built these figures, visible to all entering and leaving the college, will stand between the chapel entrance and the college.

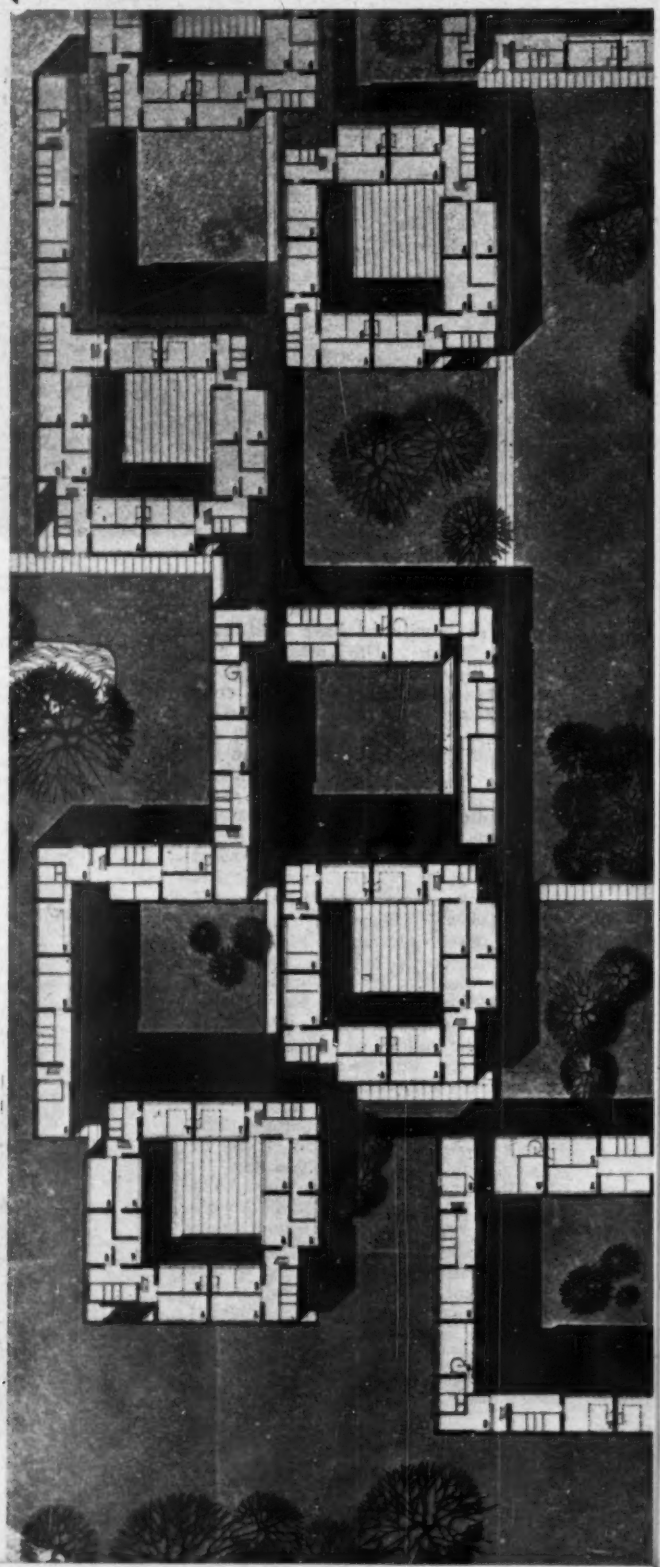
Key to sections

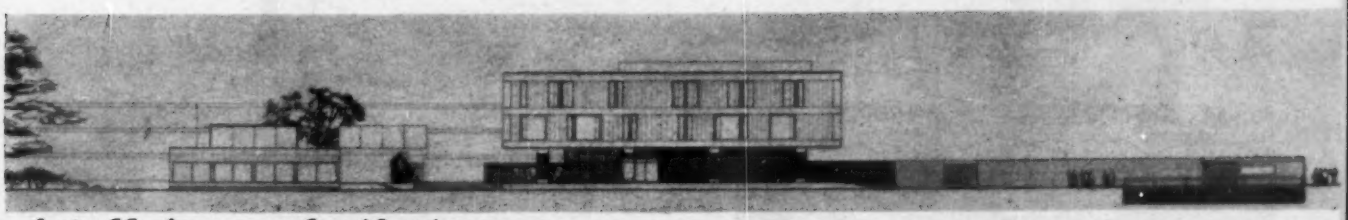




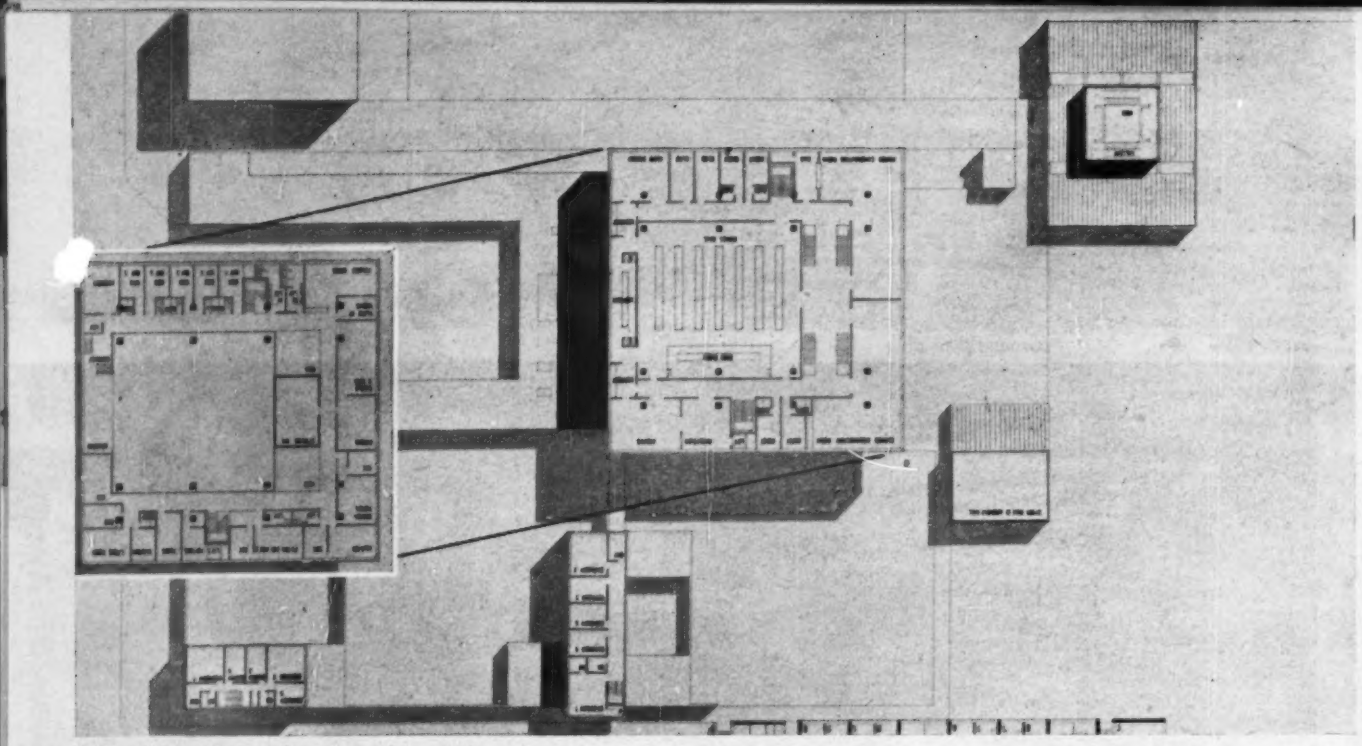


East elevation





Section GG ▲ Ground floor plan ▼



Below, first and second floor plans of the southernmost "cluster" of student residences and, above, the two upper floors of the central core. Facing page, a detail of two typical courts

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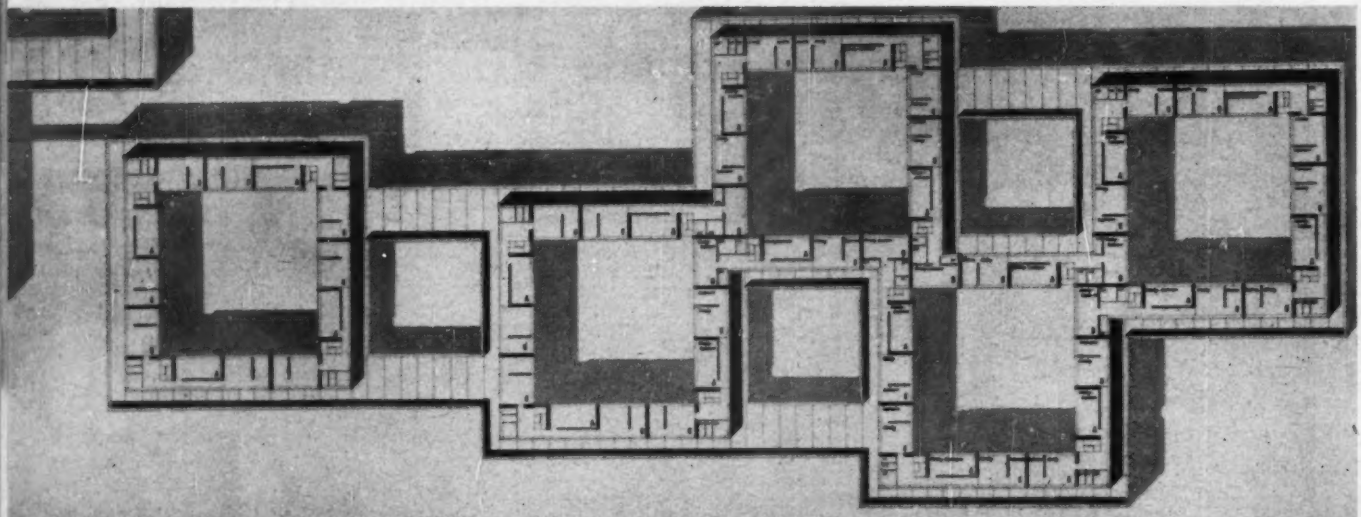
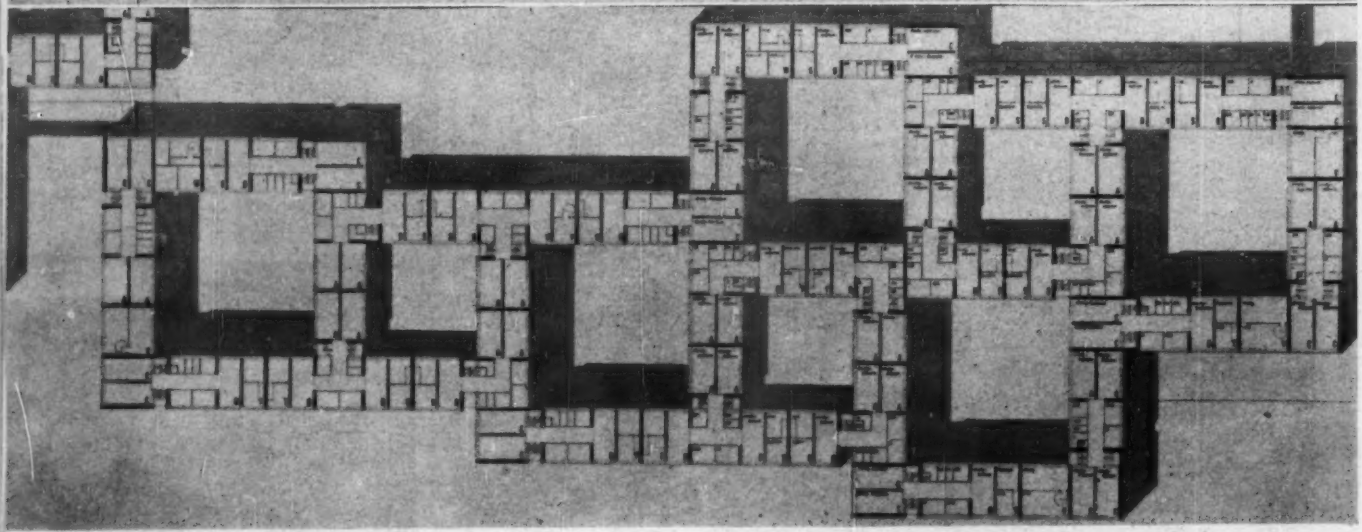
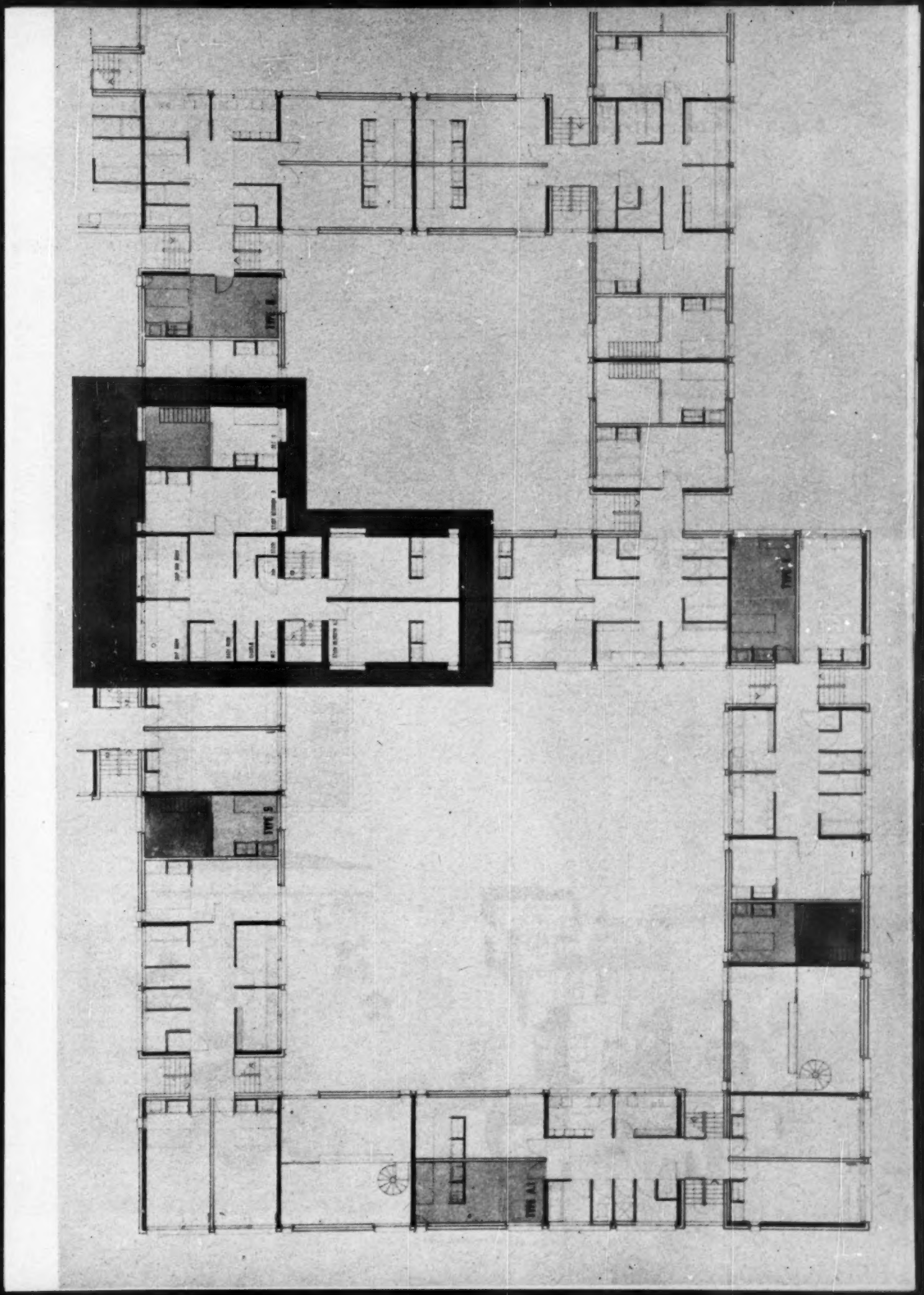
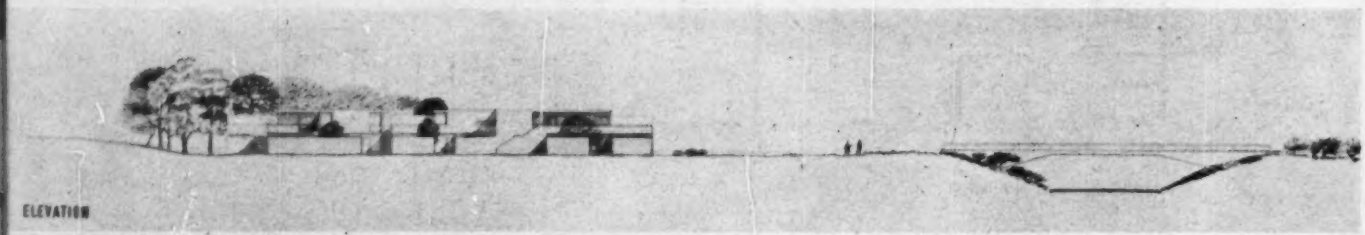




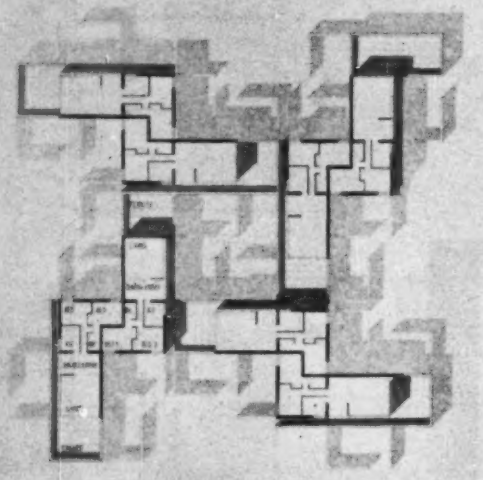


SCHEME BY RICHARD SHEPPARD, ROBSON AND PARTNERS

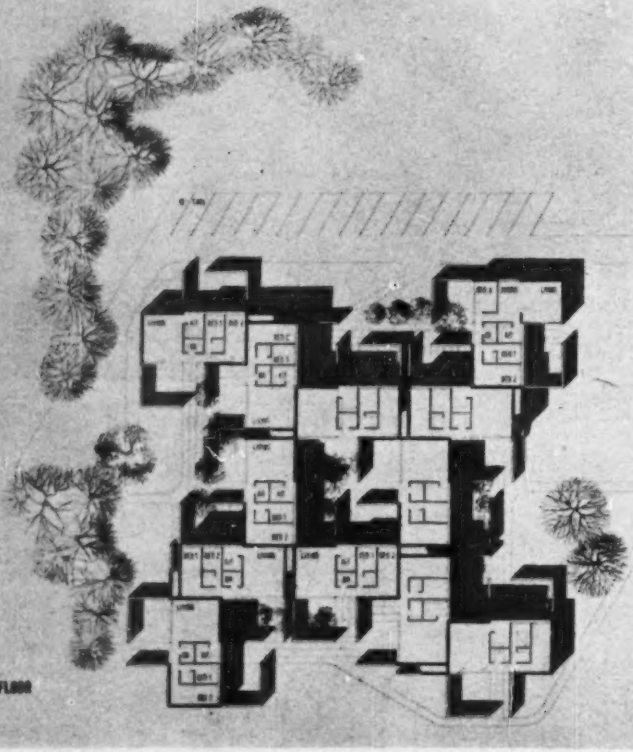
Below, plans and section of the married quarters which are sited separately to the north-west of the site (see page 11)



ELEVATION

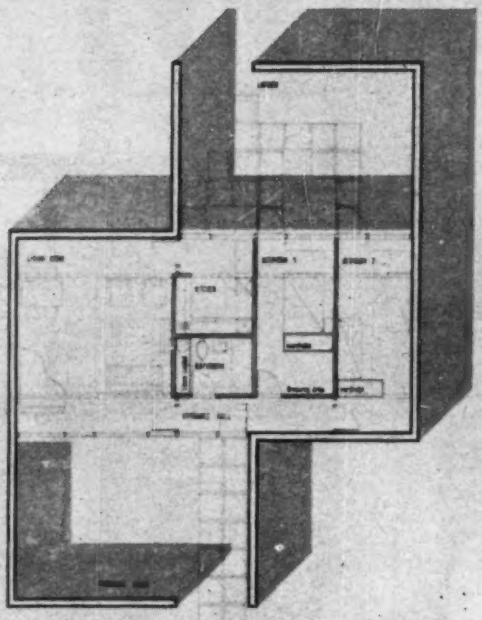


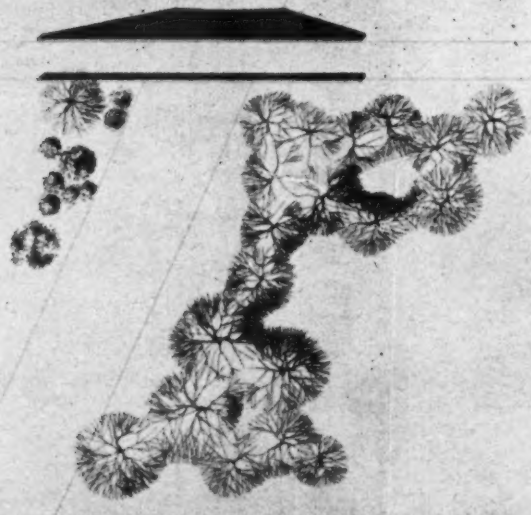
FIRST FLOOR



GROUND FLOOR

TYPICAL FLAT





Site plan

SCHEME BY HOWELL KILLICK AND PARTRIDGE

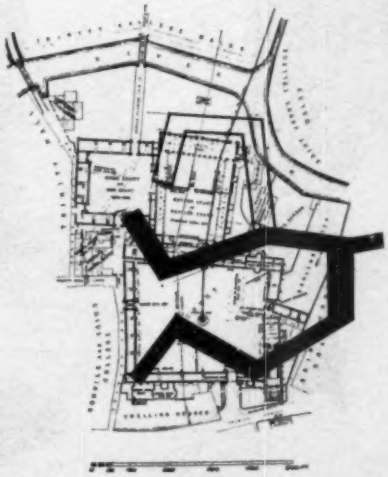
Assessors' Report

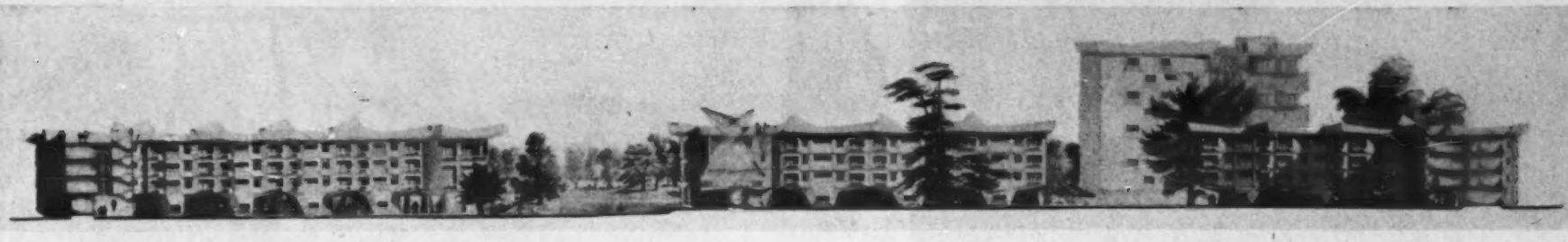
This design is of exceptional merit. It is distinctive, imaginative and completely consistent. The hall, library, etc., have their place in the group of residential buildings in which they are set in sequence; but they are distinguished from the residential blocks by their modelling and roofline.

The modelling on which the architectural effect depends is achieved by the use of pre-cast concrete panels with a Portland stone aggregate. We do not consider that the internal access halls in the double-banked blocks are really desirable for college use and we have strong reservations about the design of the master's and tutor's lodges.

Even when the cloister is excluded the total floor area in this scheme considerably exceeds that of any other scheme submitted and is about 25 per cent higher than the most economical layout. This and the cost of the surface modelling of the building is reflected in the total estimate which is given by the author as £1,304,000. The nature of the scheme suggests that this could not easily be reduced and in fact we are advised that the cost might well be greater.

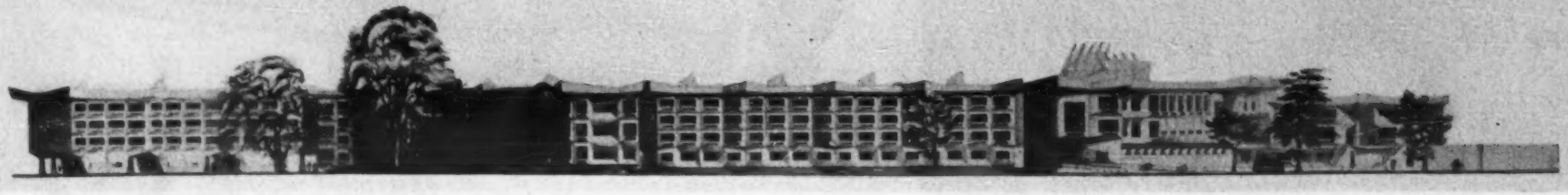
Plan comparison with Trinity



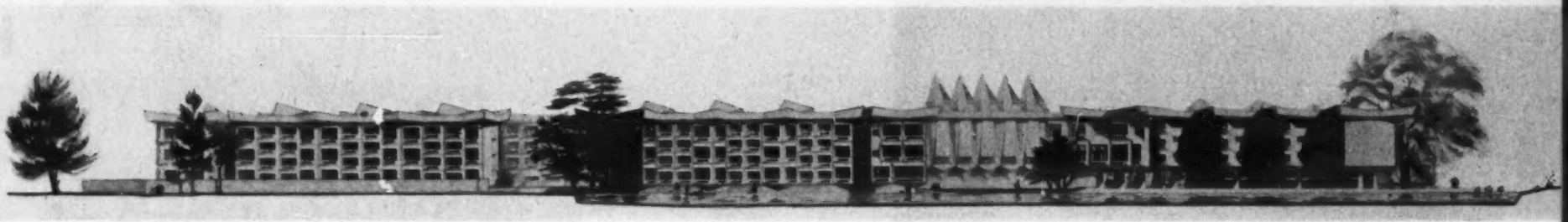


Section through library, looking west

SCHEME BY HOWELL, KILLICK AND PARTRIDGE

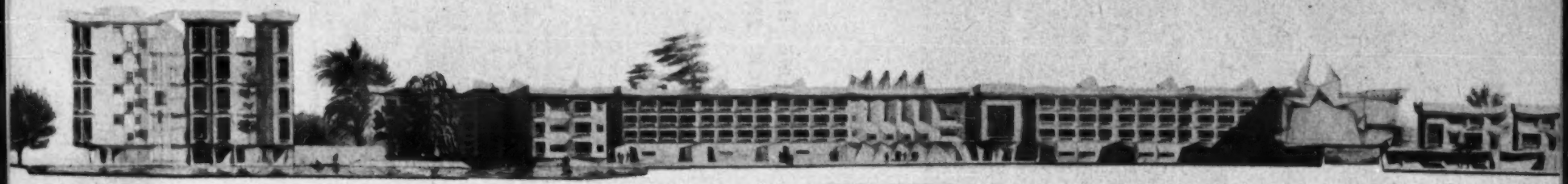


South elevation

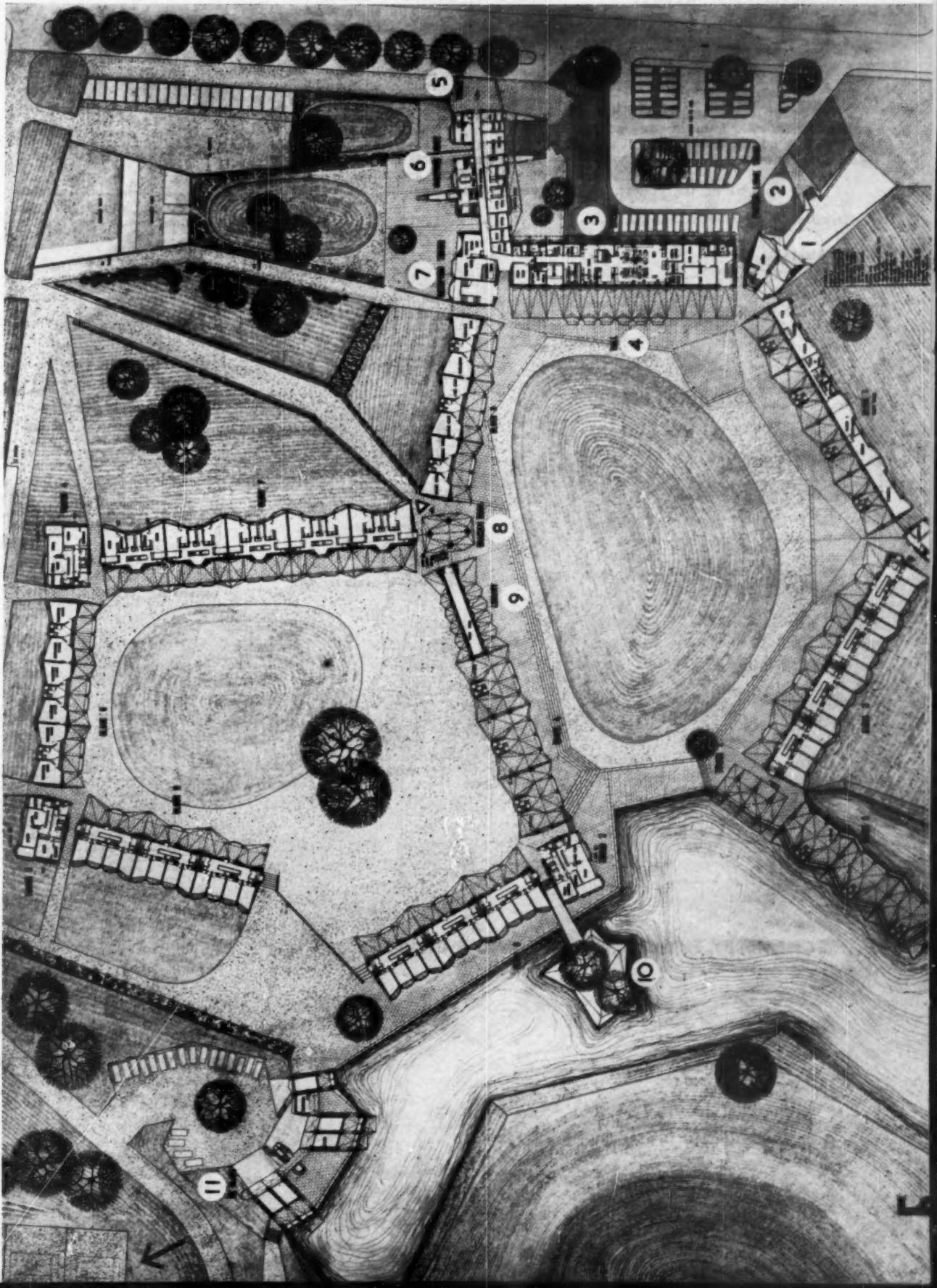


KEY: 1. Entrance. 2. Porter's Lodge Tower. 3. Kitchen. 4. Hall. 5. Tutors' Lodge. 6. Masters' Lodge. 7. Reception Tower. 8. Bracken Room. 9. Library. 10. Chapel. 11. 20 Fellows' Flats

West elevation



Section through hall, looking north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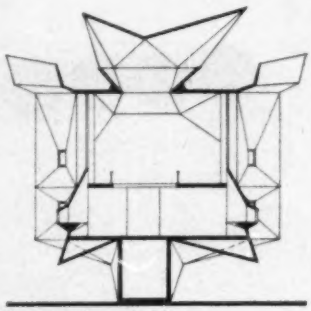
Extracts from the Competitors' Report

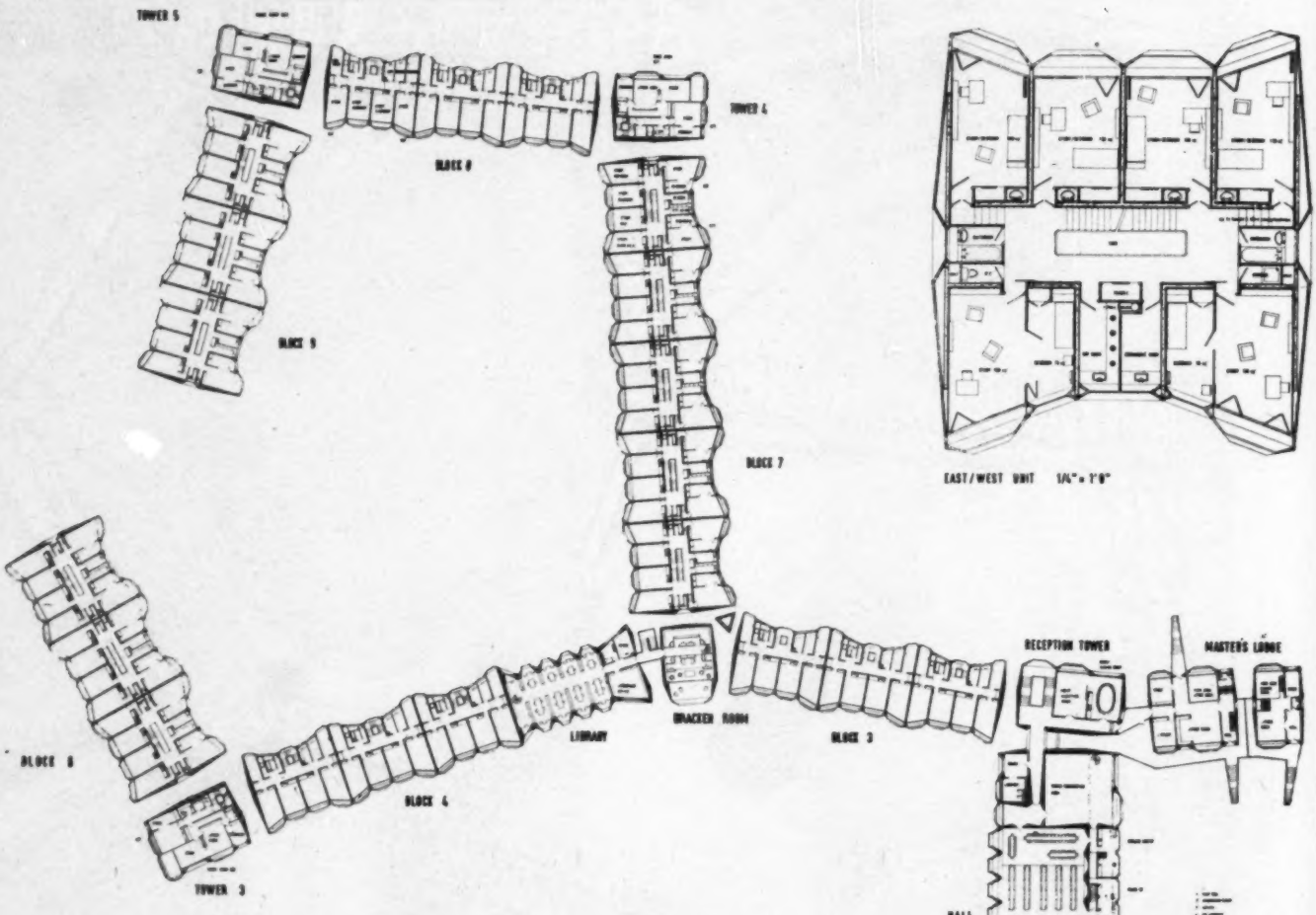
In this design every attempt has been made to create something which would be unmistakably a college and could not be taken for a school or a group of housing. The elevational system involved is very highly modelled to give maximum light and shade effects, even in dull weather. A method has been devised of achieving this, using modern technological methods.

The lay-out of the college buildings has been based on a continuous under-cover circulation system for bad weather, but with slightly more direct routes across the courts for fine weather.

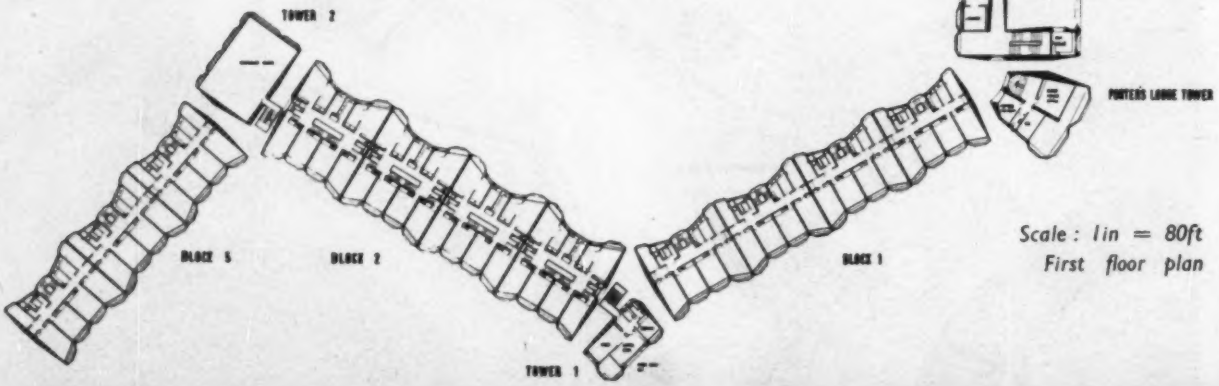
The external materials have been chosen so that there will be practically no maintenance. The panels which form almost the whole of the exterior are made of Portland stone, and the windows are of teak and aluminium. All these are materials which are capable of lasting for centuries without a constant and frequent cycle of repainting or cleaning.



Section through library



SCHEME BY HOWELL, KILLICK AND PARTRIDGE

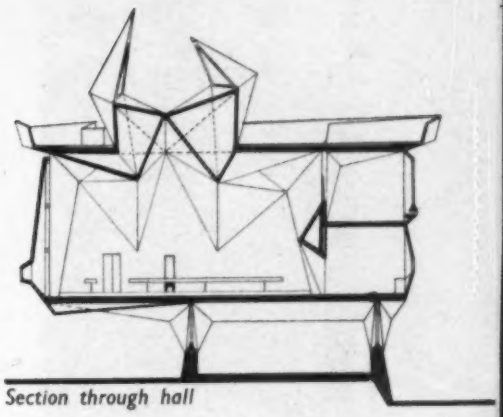


Scale: 1in = 80ft
First floor plan

Cost Analysis

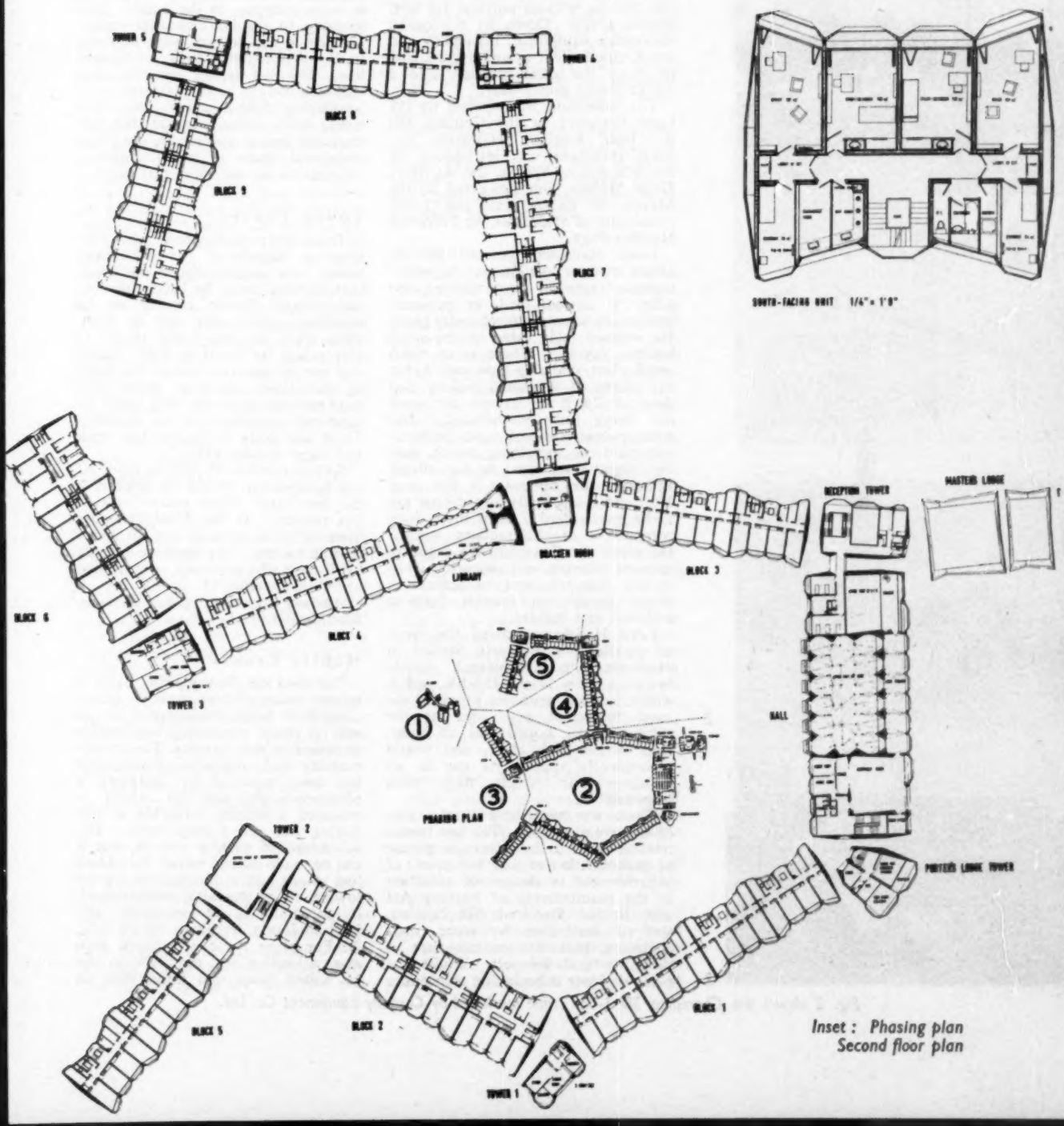
Main Analysis	£	Area ft.s.	Cost ft.s.	Cube	Cost c.ft.
Small flats ..	97,650	26,041	75/0	305,502	6/5
Residential Acc.	944,487	207,251	91/2	2,538,884	7/5½
Dining and common rooms	117,842	19,174	122/11	407,478	5/9½
Chapel	6,682	1,426	93/8½	29,094	4/7
Libraries ..	36,791	3,633	197/0½	129,132	5/6½
Administrative	37,788	8,447	89/5½	116,759	6/5½
Guest Accom...	17,062	3,770	90/6	62,044	5/6
Master's Lodge	24,866	5,235	95/0	66,735	7/5½
Tutor's Lodge..	11,462	2,413	95/0	33,391	6/10½
Porter's Lodge	19,340	5,278	73/3½	91,010	4/3
Garages ..	6,730	8,634	15/7	85,454	1/7
Totals	1,319,700				

Additional cost of perimeter planting £5,000 and car parking and cycle facilities £9,100. Total cost £1,333,800.



Section through hall

SOUTH-FACING UNIT 1/4" = 1'0"



Inset : Phasing plan
Second floor plan

BUILDING PLANT EXHIBITION

A review of the M.o.W. Exhibition, held at Greenford, June 10-17

by K. J. M. Tuck, Plant Manager of Bovis Ltd.

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OVER one hundred manufacturers and distributors of building plant were represented at Greenford, Middlesex, when the exhibition opened on Wednesday, June 10. This was the thirteenth, and by far the largest, of the M.o.W. post-war plant exhibitions. Slender-masted tower cranes pointed at the skies, their delicate jibs moving without purpose yet with infinite grace. Down by the canal, excavating equipment, mammoth and small, stood silent awaiting the signal to churn the green meadow into a sea of native brown clay.

The exhibition was opened by the Lord President of the Council, the Rt. Hon. Viscount Hailsham, Q.C. Lord Hailsham was introduced by the Minister of Works, the Rt. Hon. Hugh Molson, and supported by the Mayor of Ealing and the Lord-Lieutenant of Middlesex, Sir Frederick Handley-Page.

Lord Hailsham pointed to the object of these exhibitions—to enable manufacturers to demonstrate their plant in action, and to persuade builders to use more mechanical plant. He stressed their value to the small builder, saying: "There is so much small plant available now well within the means of the small builder that there really is no excuse for work not being fully mechanized. Too many people still look upon mechanical plant as something which only the largest firms need or can afford. Precisely the opposite is the case. No builder can really afford now not to be mechanized if he is to be fully competitive in the modern world." He stated the Government's desire to sponsor research and education within the industry, and to achieve a closer identity of interest between architect and builder.

Lord Hailsham praised the work of the Building Research Station in developing the perforated double brick on show at the D.S.I.R. stand, which, he said, probably provided the most important new idea at the exhibition. He hoped that all architects would look at it, and would subsequently specify its use in all buildings for which they were responsible.

There was very little in the way of entirely new plant. The last twelve months seem to have been a period of consolidation of past invention, of improvement in design, of attention to the requirements of Factory Act and British Standard Specification, and of realization by some plant engineers that site maintenance is desultory and inexpert. Whilst the plant designer is beginning to produce equipment that satisfies the needs of the average building site, there is still evidence that he should spend more time on site, watching his products being used in healthy and uninhibited manner.

There still seems to be a lack of co-ordination between manufacturers making related equipment. Nothing is more annoying to the builder than to have to rig up makeshift chutes and jigs to enable two pieces of plant to be used together in a production line. The self-tipping concrete skip mounted on a hoist platform is a wonderful, labour-saving idea, but where is the concrete mixer that will discharge into it without the use of an additional chute, or without spilling concrete under the hoist platform?

Tower Cranes

These were undoubtedly the outstanding feature of the exhibition. Some were single-purpose machines, that is, they could be used either as rail-mounted tower cranes, or as climbing cranes, but not as both. They vary in size from 10cwt at 50ft radius, to 4tons at 130ft radius and are of main interest to the large or specialized contractor. Some were dual-purpose machines, that could be used rail mounted or as climbers. These are likely to interest the small and large builder alike.

Special mention should be made of the Buildmaster, model 42, since it is the first large tower crane built in this country. It has a height under hook of 117ft, when it will lift 30cwt at 88ft radius. This machine is built by Ruston Bucyrus and is marketed by Abelsons (Fig. 1).

Abelson & Co. Ltd., Sheldon, Birmingham.

Mobile Cranes

The two-ton Tunny (Fig. 3) is a tractor-drawn, "cross-country" crane, capable of being manoeuvred in and out of places previously inaccessible to cranes of this capacity. The crane's mobility and simplicity of operation has been achieved by designing a platform-based unit on which is mounted a slewing turntable, a derricking jib, and a rope hoist. The advantage of such a unit is that it can be made mobile merely by adding two wheels and a drawbar for tractor towing or, as was also demonstrated, by mounting it on practically any lorry or four-wheel drive vehicle (Fig. 3). For more static operations, such as at a loading bay, the platform can be bolted down and fitted with an

Fig. 2 shows the Champion 3D 1-ton crane marketed by Cornelly Equipment Co. Ltd.

BUILDING PLANT EXHIBITION

auxiliary motor. The Tunny is capable of slewing through an arc of 300 degrees.

Tunny Cranes Ltd., Moreton-in-Marsh, Gloucestershire.

Hoists

Centre slung hoists are becoming increasingly popular, and rightly so, since frictional losses are substantially reduced. British Hoist & Crane Co. deserve all the credit for introducing design (Fig. 4) to the British market. This company has now produced an automatic tip-skip which possesses some interesting features. Instead of relying on collision between the skip and part of the hoist tower, the tipping action is triggered off by the egg stop on the safety cut-out. This seems to have two advantages. Very high hoisting speeds are possible, and no shock is applied to the scaffold tower. At present this equipment is only available in the 12 cubic foot size—suitable for use with 14/10 mixers. However, an 18 cubic foot model is on the way, which will suit the now popular 18/12 mixer, as well as the 21/14 size. B.H. & C. deserve full marks for the robustness of their winch units and idler pulley. Almost all moving parts are now provided with ball bearings. The large grease space in the bearings permits them to function unattended for up to six months, although this is not recommended. It is encouraging to discover that hoist manufacturers are appreciating the difficulty of persuading the hoist driver to lubricate his cat-head pulleys each week.

British Hoist & Crane Co. Ltd., Compton, Berks.

Excavators

The giant excavators and loaders on show were of more interest to the civil engineering contractor than to the builder. However, the Fordson tractor equipped with loader and backacter was a familiar sight, and is of particular interest to the builder engaged on trenching for drains or strip footings.

Amongst the several varieties on show the Shawnee "Warrior Digger" was of special interest. Whilst it compares favourably with its competitors as regards performance and output, it costs much less.

Steel Fabricators (Cardiff) Ltd., Pengam Road, Roath, Cardiff.

The Perforated Double Brick

Although out of place at a plant exhibition, this material deserves description. It attracted as much, if not more, attention than the plant. The Building Research Station has developed a new type of perforated wire-cut brick (Fig. 6), of which two variants, the V5 and V6, have been made. When made with a height of 2⅝in, each V5, or V6, occupies the space of two standard bricks, though it weighs no more than one. The big holes in the middle provide a convenient hand-hold and also divide the mortar joints. To lay a single leaf (9in) wall in these bricks is therefore equivalent to laying both leaves of an 11in cavity wall, including the wall ties . Tests have shown that walls built with the new bricks have a satisfactory resistance to rain penetration. Since the perforations form sealed air cells when the bricks are laid, the walls afford good thermal insulation—better than an 11in wall in solid bricks. Strength is ample.

Bonding at quoins is achieved by using perforated bricks of standard size preformed or cut on site to maintain a cavity.

For special purposes, bricks of the same pattern but 4⅛in high can be made. These can be used in combination with the 2⅝in bricks, giving new and interesting opportunities to architects and craftsmen.

Dumpers

Three dumpers, or dump trucks, seemed to have special interest. Abelsons have produced a 5/7 yard diesel dumper on the new Austin 702 chassis with forward control cab. This machine is sensibly designed for extra heavy work, and at its reasonable price should prove popular.

Abelson & Co. Ltd., Sheldon, Birmingham.

The new Johnson ½yd diesel dumper has an articulating chassis. It gives the impression of being well conceived and should give good service on the larger building site.

C. H. Johnson Ltd., Adswood, Stockport, Cheshire.

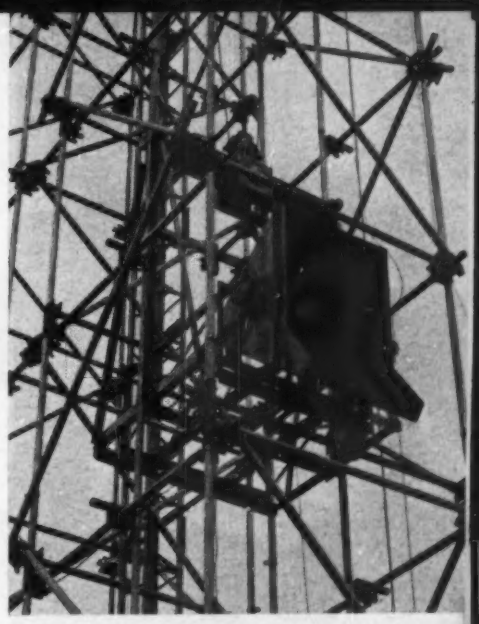
The new Congreve 15cwt dumper is a delightful little machine. Powered by a Petter or Lister diesel engine, it features direct transmission (Fig. 5). This is an innovation in the small dumper-field. The absence of belt drive should increase efficiency and reduce maintenance cost. The stout construction is marred only by the somewhat flimsy handbrake.

Slater & England Ltd., Congreve Works, Awson Street, Coventry.

Concrete Shuttering

The general impression gained at the exhibition was that we are still a long way from discovering economic shuttering techniques in this country. This is probably more the fault of building management than of plant design.

The "Prometo" system aroused great interest when it was introduced a few years ago, but since then its use seems to have been rather restricted. A similar system was on



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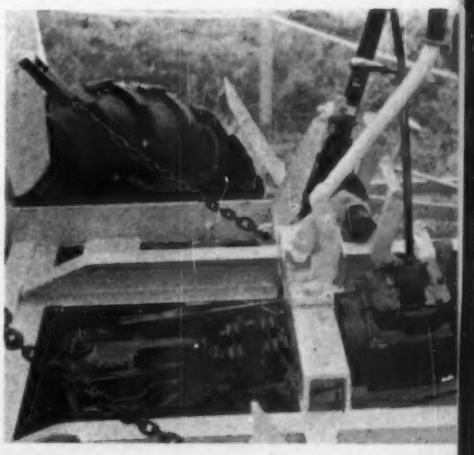

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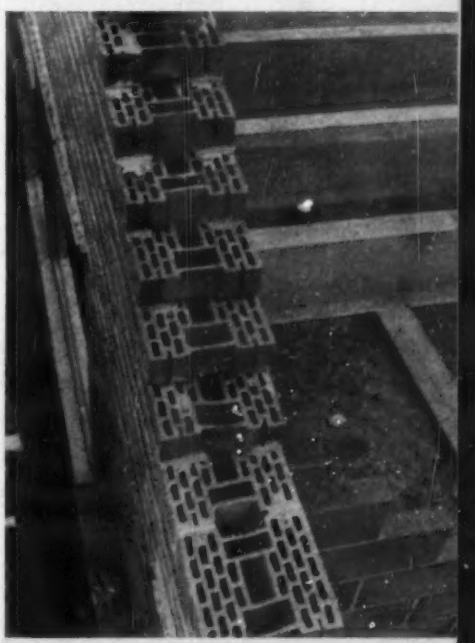

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BUILDING PLANT EXHIBITION

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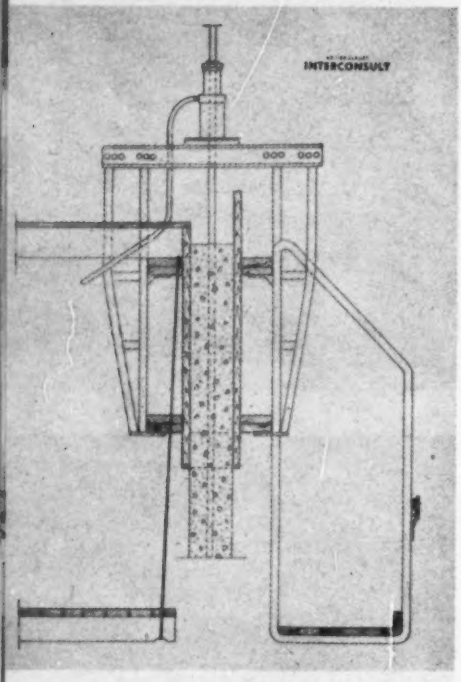

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show at the exhibition, by Cable Covers Ltd. Called the "Interconsult" system (Fig. 8), it consists of a series of hydraulic jacks which support yolks which in turn carry 4ft of wall shuttering and three working platforms. Each jack climbs on a rod set centrally in the wall. The advantages claimed for this system over its competitors are:

(i) The jack design enables it to climb on rusty or pitted rods.

(ii) These jack rods, which screw together in 10ft lengths, are recoverable. A sleeve follows the jack as it climbs the wall and leaves a slight void between the rod and the concrete.

(iii) The rate of climb is adjustable from a small fraction of an inch every six minutes to 1in every six minutes. This not only enables the sliding shutter to be kept horizontal, but also allows it to "tick over" in the event of a breakdown in concrete production.

Cable Covers Ltd., St. Stephen's House, London, S.W.1.

Drilling Holes Through Concrete

This unenviable task is made easier by the introduction of cylindrical diamond edge drills to the building industry.

The Craelius "Pixie" (Fig. 7) is an efficient little machine consisting of a well-made drill stand, a tough two-horse-power electric drill, and a variety of cylindrical bits. When drilling vertically, it is merely necessary to weight the drill stand. For skew or horizontal drilling, a bracing leg is provided which may be attached to the drill holder. It will drill holes from 2in to 6in diameter, and up to 2ft in depth. The average rate of cutting is about 1in a minute. After cutting, both core and hole are found to have highly polished surfaces.

Craelius Co. Ltd., 11 Clarges Street, London, W.1.

Crane Skips and Concrete Storage Hoppers

At last a plant manufacturer has produced concrete skips that really will discharge dry stiff concrete without a deal of prodding with shovel or scaffold tube. Abelsons are to be congratulated for bringing to an end much of the wasted effort that has always occurred in the concrete distribution gang. Here is a real contribution to productivity in the industry.

Abelsons had on show side discharge skips of all shapes and sizes, all with large free discharge openings (Fig. 9), and all looking as though they were eager to handle that glutinous, contrary material called concrete. A word to the designer of the roll-over skip though. The short yoke-like handle cannot fail to collide with the discharge chute of the average closed drum mixer. If the yoke were longer and the pivot point lower, this trouble would not arise. Unfortunately the new rubber skip designed by the Building Research Station was not in evidence. Surely in these days of light tower cranes, when unnecessary dead weight at the end of the hook seriously reduces the pay load, rubber or Fibreglass skips should be available.

Abelson & Co. Ltd., Sheldon, Birmingham.

Builders' Canopies

For some time now builders in this country have used transparent plastics as a protection against weather. One difficulty has been that the thin materials used have tended to tear and disintegrate in high winds.

One of the stands at the exhibition was formed of scaffolding covered in a reinforced plastic material manufactured by B.X. Plastics Ltd., and marketed by H. Fine & Son Ltd. This material, "Bexthene", shows promise and may well increase the popularity of these canopies.

H. Fine & Son Ltd., Vale Royal, York Way, London, N.7.

Scaffold Tube Maintenance

Builders who have not invested in galvanized scaffold tube will be interested in the tube cleaning and painting machine marketed by Hunter & Co. Ltd.

This equipment was being demonstrated at the exhibition. It cleans and paints tube at the rate of 1,500ft an hour. The paint is dried before the tube leaves the machine which can be handled straight to stock. This equipment can be bought, hired, or hired on contract.

Hunter & Co. Ltd., 19 Clarges Street, London, W.1.

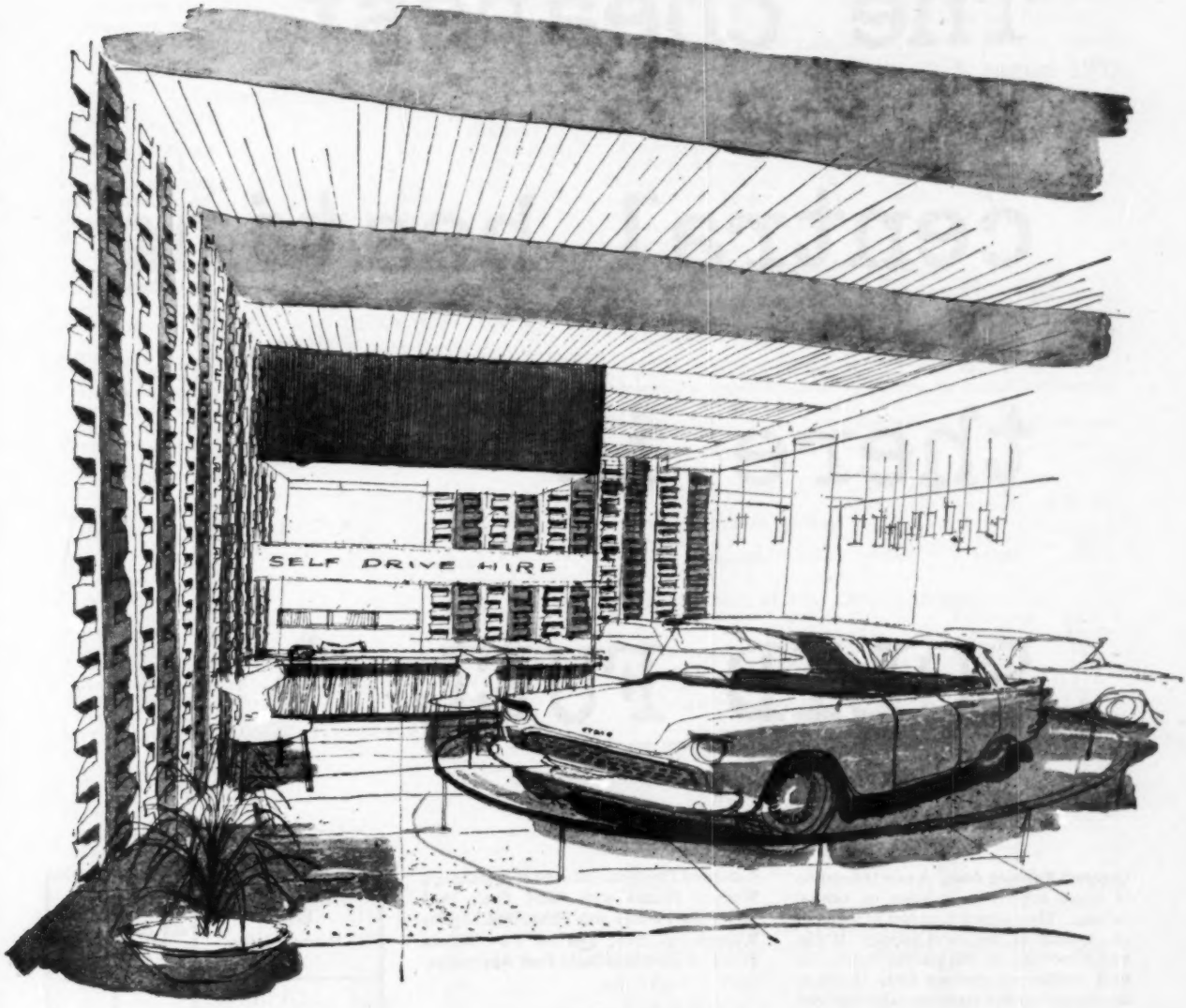
Pumps

The new Mudlite pump, model M.I., is a reliable item of equipment which can be maintained with the minimum amount of expense. The pump is powered by a Clinton four-stroke petrol engine, and has a 2in. clip-on suction and 3in. clip-on discharge, with a maximum output of 2,500 g.p.m. Standard models from the company's Floodmaster range of pumps were also on display.

Auto Diesels Ltd., Uxbridge, Middlesex.

The redesigned Alcon 6in pump was on show in its new form. Three alternative prime movers are now available, the Lister HA2, the Armstrong Siddeley Twin and the Ruston 2YWA diesel engines. The output has been increased to 60,000 gall/hr., but outputs of up to 70,000 gall/hr with a maximum head of 125ft can be achieved when powered by different engines. Priming time has been halved.

Arthur Lyon & Co. (Engineers) Ltd., 6 Carlos Place, London, W.1.



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The Architects' Department, formerly at 125, High Holborn, W.C.1,
has been reopened in the Company's new London premises at 19/21, Mortimer Street, W.1.
You are invited to visit our spacious showroom on the 1st Floor and to make use of the improved facilities of our special advisory service.
Our artist Nigel Walters depicts Palladio Magnus wallpaper "Scando".

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OF DECORATIVE SCHEMES

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THE WALL PAPER MANUFACTURERS LIMITED
19/21 MORTIMER STREET LONDON W1
OR KING'S HOUSE KING STREET WEST MANCHESTER 3

WPM

D

The cheapest central heating there is — SOLID FUEL

Cheapest Running Costs. A new generation of house hunters is insisting on central heating. They regard it as just as much of an essential as the water supply. It's as well then that *solid fuel* central heating has such rockbottom running costs. Look at the figures on the right: *no other fuel* can compare for cheapness with solid fuel.

Low Capital Costs. It's not an expensive business installing a *solid fuel* central heating system. In fact, the recently developed small-pipe system, so perfect for smaller or medium-sized houses or bungalows, is of such low capital cost that central heating can now be put within the reach of a much larger section of the public than ever before. Special 5 year credit facilities are now available.

For Architects. "Central Heating for Houses." This 120-page survey of solid fuel central heating outlines the various systems available, from the open-fire-and-back-boiler to the latest small-pipe system. Copies 2/6 each. Write to the Coal Utilisation Council, 3 Upper Belgrave Street, London, S.W.1, for this booklet or any of the following publications: List of Approved Domestic Solid Fuel Appliances, Warmer Homes with Solid Fuel, Fuel Stores for Houses and Flats, Building for Warmth—all free; and for 1/6—Correct Fixing of Domestic Solid Fuel Appliances.

Compare the Running Costs! This table shows typical comparative costs for different fuels. These have been calculated for a 3 bedroom house of some 1000—1,200 square feet and are those of an *average* week's heating and hot water supply during the 30-week heating season. Fuel prices vary, of course, and local costs can easily be calculated from those given. If you would like the data on which these figures are based, write to the Coal Utilisation Council, 3 Upper Belgrave Street, London, S.W.1.

COKE *Sectional Boiler*	**£9 ton**	**21/-**
ANTHRACITE *Gravity Feed Boiler*	**£12 ton**	**20/-**
GAS	**1/5d therm**	**33/1d***
ELECTRICITY	**1d unit**	**45/7d***
OIL *Sectional Boiler Conversion*	**1/5d gallon**	**31/5d**

**Gas and Electricity costs exclude Standing Charge*

CURRENT MARKET PRICES (LONDON)

These prices apply to material purchased in the quantities named or otherwise as might be expected for a new building of moderate size. They include delivery and are the material basis used in the build-up of "Measured Rates" and subject to the conditions heading that schedule. Prices are under careful constant review but should be confirmed.

5 August 1959

AGGREGATES AND SAND

1½in—all in—ballast	26/6	Yard cube
¾in do. do.	27/–	delivered
¾in screened shingle	24/6	(in five-yard
¾in do. do.	25/9	loads or
¼in granite chippings	50/–	more)
Sharp washed sand	27/6	
Pit sand	24/6	
Building sand	24/–	
Broken brick	21/–	
1½in shingle	22/–	
Cartage of muck	10/–	

BUILDING MATERIALS AS DESCRIBED, CENTRAL LONDON

CEMENTS packed in paper bags	Per ton
Portland in 6ton lots	112/–
Do., from 1ton to 5ton 19cwt do.	124/–
Do., Rapid hardening (6ton lots)	122/6
Do. (but 1ton to 5ton 19cwt)	134/6
Cement "Aquacrete" (do.)	156/6
Do., "417" or "Polar" (do.)	156/6
Do., "White" 1ton (lots)	277/6
LIME—	134/6 (1ton loads) deliv'd
Hydrated .. including ..	132/– (2/3 do.) do.
White .. .. Bags ..	122/– (4/5 do.) do.
	120/– (6 do.) do.
PLASTER—	
Keenes, coarse, pink	234/– ton
Do. do. white	239/– do.
Sirapite, do.	175/– do.
Do. finish	183/3 do.
Hardwall, do.	174/– do.
Plaster, coarse, pink	164/6 do.
Do. do. white	174/– do.
⅜in Gypsum Plaster Lath ex works (600sq yds)	2/5 sq yd.
⅜in Do. do. Wallboard do.	2/8 do.
3½in Jute scrim (100yd roll)	9/4 each
Cow hair (under 3cwt)	109/– cwt
FIRECLAY—	
In non-returnable bags (1ton lots)	213/– ton delivered
Fire cement	12/3 14lb

BRICKS

BACKING BRICKS (in truck loads)—		
Flettons	118/– per 1,000	delivered
Do. Keyed	120/–	do.
Do. bullnose	152/6	do.
Blue wirecuts (Net)	542/–	do.
White	202/–	do.
Southwater engineering (Class A)	400/6	do.
Firebricks—2½in	95/9 per 100	delivered
Do. —3in	115/-	do.
STOCK BRICKS—		
Mild stocks	109/– per	1,000 at Works
Second, do.	268/6	do.
First, do.	294/6	do.
Add for delivery—approx. 55/– per 1,000 in lorry loads.		
FACINGS (ex truck or lorry)—		
Rustics	150/– per	1,000 delivered
White	220/–	do.
Blue pressed, 2½in (Net)	604/–	do.
Do. bullnose	618/–	do.
Reds (Multi sand faced)	370/–	do.
White glazed stretchers	1696/–	do.
Do. headers	1670/–	do.
Do. bullnose	2120/–	do.
Do. double stretchers	2053/–	do.
Do. double headers	2173/–	do.
Breeze fixing bricks	30/3 per 100	
Fire tile and lumps	34/– ft cube	
Wall ties—8in by ½in by ⅛in, galvanized	72/6 per cwt	
Cement mortar (1 : 3) hand-made	99/6 yd cube	

BRICKLAYERS' SUNDRIES—

AIR BRICKS	9 by 3in	9 by 6in	9 by 9in	12 by 9in
Iron .. each	2/5	3/11	5/10	7/10
Galvanized do. do.	4/1	6/9	10/2	13/7
Terra Cotta do.	1/2	2/4	5/7	11/1
Chimney pots, Terra	1ft	2ft	3ft	4ft
Cotta (11 to 24) do.	8/7	14/11	34/1	58/11

PARTITIONS—

18in by 9in Blocks keyed for plastering

	2in	2½in	3in
Per yd super in 6ton lots			
In solid clinker including any half blocks	3/9	4/4	5/3
In cellular clinker blocks	3/11	4/7	5/3
In hollow clay blocks	—	4/5	5/5
Clinker blocks in small quantity	6/–	6/11	8/4

Intermediate quantities in all types may be had at intermediate prices.

Smooth in lieu of keyed faces extra cost per side 3d per yd super

SINKS—

Fireclay white glazed in and out—standard quality

	24 by 18in	30 by 18in	30 by 20in
London pattern, no overflow, 6in deep	73/–	90/9	100/9
Belfast, plain edge, 10in deep	86/6	144/6	194/9

FLUE, LININGS, PLAIN, CIRCULAR (FIRECLAY)—

	Foot lineal Straight	Each Bends
9in diameter	4/8	14/–
10in do.	5/8	17/–
12in do.	10/9	32/9
9in diameter, beaded end, 12in high		6/3

FLUE PIPES AND FITTINGS—

	4in	5in	6in
Heavy asbestos type, 6ft length	18/6	25/6	32/6
Do. 3ft length	9/3	12/9	16/3
Do. bends	7/2	9/–	10/8
Light asbestos type, 6ft lengths	16/–	20/–	25/6
Do. 3ft length	8/–	10/–	12/9
Bends	5/7	7/1	8/8
Baffler	15/5	18/4	19/4

DRAINAGE GOODS

GLAZED STONEWARE STANDARD LIST (NOV., 1956)

	4in	6in	9in
ORDINARY TYPE—Each			
Pipes in 2ft lengths	3/4	5/–	9/–
Bends	5/–	7/6	20/3
Junctions (4in on 4in, 6in on 6in, 9in on 9in)	8/4	12/6	27/–
Gullies with 4in outlets	12/6	13/9	22/6
4in horizontal inlets	4/–	4/–	4/–
4in vertical do.	6/–	6/–	6/–
Black iron grids	1/6	2/10	5/6

Adjustment to Current Cost

	2ton lots or more	Less than 2ton lots
2in to 9in diameter "Best" pipes and fittings.	50 pieces or more	Under 50 pieces
Percentages to add	—22½%	—5% NET

Further percentages to be independently added in respect of: British Standard pipes, etc., 10. "Best" Tested pipes, 37½ British Standard Tested, 47½.

IRON DRAINAGE GOODS—

Each	4in	6in
Cast iron pipes, 9ft long	84/6	123/9
Do. 6ft do.	60/4	92/10
Do. 4ft do.	46/1	71/2
Do. 2ft do.	28/–	42/2
Short bend	19/–	50/7
Junction	33/8	70/6

CURRENT MARKET PRICES (Continued)

DRAINAGE GOODS—Continued

GULLEY PARTS—	4in	6in	
Traps, high level, invert	33/8	91/4	each
Inlet, bellmouth pattern	17/8	35/7	do.
Do. with one vertical branch	31/–	58/2	do.
Do. with two do.	84/–	122/3	do.
Extra for sealed cover	10/8	13/10	do.

RAINWATER SHOES—	4in	6in	
With vertical inlet and rebated top	44/1	87/9	each
Extension piece	19/4	23/3	do.
Flat loose coated grating	4/7	4/7	do.
Loose solid coated cover	6/2	6/2	do.

MANHOLE CHANNELS, WHITE GLAZED— Each	4in	6in	9in
Straight, 2ft long	17/5	25/6	42/11
Taper, do.	29/–	29/–	44/–
Bends, main, half section	33/8	48/9	80/–
Do., branch, do.	20/11	29/–	—
Do., do. three quarters, do.	29/–	46/6	—
Junctions, single	27/10	48/9	—
Do., double	38/3	66/3	—

BROWN GLAZED CHANNELS— Based on standard list (less than 100 pieces)	4in	6in	9in
Half-round main channel (2ft long)	2/6	3/9	7/–½
Extra for stop ends	2/6	3/9	6/9
Extra for outlets	5/–	7/6	—
Channel bends with splayed ends	7/6	11/3	—
Three-quarter section do.	10/–	15/–	—

MANHOLE COVERS—	Black
24 by 18in foot traffic	29/3 each
Do. Strong do.	53/9 do.
Do. Light car traffic	95/3 do.
Do. Road traffic	119/3 do.

SUNDRIES—	Galvanized
Manhole steps	9/3 each
4in Mica valve fresh air inlets	16/– do.
Plumber's hemp	9/– per lb
Gaskin, caulking	1/5½ do.
Canvas backed hair felt, 4in wide	9d per ft run

ROOFING MATERIALS

WELSH SLATES (delivered)— Sizes in inches	Full Loads per 1,000	Quantity 500 to 599 per 100	1 to 49 per doz
22 by 11	2246/–	265/–	39/–
20 by 10	2021/6	237/6	35/–
18 by 10	1413/–	164/6	24/3
16 by 10	1120/–	131/–	19/3
14 by 9 Damp Course	668/–	70/9	10/6
14 by 4½	328/–	31/–	4/9

TILES (Brosley and Staffordshire)—	per 1,000	per 100
10½in by 6½in Machine made, 6 ton lots	302/6	44/9
Do., hand made, sand faced (Berks red)	327/–	58/–
Hips, valleys and angles	36/3 per dozen	
Plain concrete tiles	per 1,000 210/6	per 100 25/6

Sheeting asbestos corrugated, 6in pitch	8/3½ yd super
4½in by 16 gauge, drive screws (galvanized)	17/9 gross
7½in by ⅜ hook bolts and nuts (do.)	57/9 do.
Washers, round, flat galvanized	4/10 do.
Do. do. bituminous	2/– do.

ROOFING FELT—	
Sanded bitumen felt (44lb)	1/1 yd super
Do., but 60lb in weight	1/7 do.
Inodorous felt, best quality	2/11 do.
Do., second quality	2/3 do.
Underlining	1/8 do.
Sheathing	1/8 do.
Galvanized felting nails	2/4 lb

THERMAL INSULATION—		
½in Insulating Gypsum Baseboard	(600sq yds)	3/– sq yd
½in Do. Do. Lath	do.	3/– do.
½in Do. Do. Wallboard	do.	3/3 do.
½in Asbestos (Fully-compressed) Sheet		8/4 do.
1in Insulating Cork Slabs		7/6 do.
Silicate Cotton (2ton lots)		1/6 ft cube

STONE

PER FOOT CUBE in random blocks not exceeding 20ft cube in each, free on rail London.

Monks Park 9/7 St. Aldhelm 10/10
Portland brown Whitbed 9/2
Doulting 10/2 Beer 9/–

TIMBER

Softwood—sawn—random lengths.

	Per standard	Per cubic ft
Carcassing quality	£105	12/8
Joinery quality	£125 and up	13/4

Plain edged unsorting flooring per square	¾in 90/–	1in 110/–	1¼in 138/–	1½in 165/–

¾in Hardboard 4/1 sq yd.
Larger quantities cost less.

SUNDRIES—	Dia.	3in	6in	9in
Black hexagon bolts, nuts and washers. Each	¼in	10d	1/2	1/5
	⅜in	1/3	1/8	2/1
	½in	1/9	2/4	3/–
Sashline, hemp, good quality Per yd Run		No. 6 10d	No. 8 1/1½	No. 10 1/5
Floor brads				84/3 per cwt
Cut Clasp Nails				85/6 per cwt
Steel ordinary screws	1in No. 8	3/8	2in No. 8 6/3	per
Brass, do.	Do.	9/8	Do. 17/–	gross

HARDWOOD. Normal joinery quality.		Per ft cube
Mahogany, African	Square edge	30/–
do. Honduras	do.	66/–
Teak, Burma and Siam	do.	78/–
Walnut, Australian	do.	84/–
Oak, English	Sawn Logs	42/–
do. Yugoslavian	do.	47/6
Walnut, African	do.	25/–

BUILDING BOARDS

Description	Rate	Unit
16mm Birch blockboard	202/–	Per 100ft
22mm do. do.	242/–	
Austrian Mahogany faced one side, blockboard 18mm thick	348/–	super,
Austrian figured Oak faced one side, blockboard 19mm thick	407/–	but
Beech, 6mm plywood	108/–	from one board
Birch, do. do.	83/–	
Do. 9mm do.	120/–	up to
Teak faced one side, plywood 6mm thick	374/–	a
Austrian figured Oak one side, 6mm	229/–	
Australian do. Walnut do. do. ⅜in	383/–	bundle

IRONMONGERY

	2in	3in	4in	5in	6in
Cast iron Butts, per pair	1/4½	2/4	3/7	6/11	9/8
Hinges, spring, single action regulating, japanned, each	—	8/3	12/9	16/9	22/3
Do. but double action spring only, each	—	17/6	22/3	21/–	35/9
Do. blank only, each	—	10/3	14/–	28/–	24/3

Up and down with MARLEYRAIL

Architect:
DAVID PERCIVAL, B.A., A.R.I.B.A., M.T.P.I., NORWICH CITY ARCHITECT.

Contractors:
GILBERT ASH LTD.

At the Hewett School, Norwich, black Marleyrail was used. Marleyrail is available in grey, brown, red, pewter, metallic blue, metallic green, bronze and black. Marleyrail vinyl handrail can be supplied only or supplied and fixed by Marley at competitive prices.

1,258 square yards of Marley Floor tiles were laid in this school.

MARLEY SEVENOAKS KENT
Sevenoaks 55255.
London Showrooms:
251 TOTTENHAM COURT RD., W.1

Portland Stonework

"Big Top" Site, Birmingham.

Architects: Cotton, Bullard & Blow, Waterloo St., Birmingham 2.

Contractors: Sir Robert McAlpine & Sons (Midlands) Ltd., 80 Park Lane, London W.1.

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Head Office: **BATH.** *Telephone 3248.*

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BELFAST

CURRENT MARKET PRICES *(Continued)*

IRONMONGERY—*Continued*

	12in	18in	24in	30in	36in
Tee hinges (japanned), per pair	2/-	3/10	—	—	—
Do., but stronger, per pair	3/4	6/1	8/3	—	—
Hook and Ride hinges, per pair	—	—	13/4	16/3	24/10

BOLTS—each—	3in	4in	6in	8in	10in	12in
Cabinet, barrel, straight or necked	1/6	1/8	2/3	—	—	—
Square spring, with brass knob	1/4	1/6	1/11	—	—	—
Tower bolts	—	1/10	2/8	3/6	4/5	5/2
Barrel bolts	—	2/9	4/-	5/2	6/8	8/1
Add to Tower or Barrel bolts if necked	½*d*	¾*d*	1*d*	1*d*	1*d*	1*d*

LOCKS—each—

Rim lock, 2 lever, wrote case, brass bolt and bushing	12/9	Brass furniture or Bakelite do.	5/-
			3/3
		Bakelite finger-plates	2/8
Mortice lock, 2 lever, bushed	12/9	Brass furniture or Bakelite do.	8/9
			3/10

Cylinder latches, japanned case	16/-
Brass sash fastener	each 5/-
Casement fasteners (malleable)	do. 1/7
Do. stays (do.)	do. 2/2
Axle pulleys (brass face, iron wheel) 1¾in	do. 3/3
Do. as last, but with brass wheel 1¾in	do. 4/11
Sash line, No. 8 Anchor, yellow label	per yard 1/-

METAL GOODS

British rolled steel joists ex mills to basis sections on site (6in by 5in, 8in by 5in or 6in, and 10in or 12in by 6in)	£43/10/0 per ton
Extra cost over basis for following sections—	
9in or 18in by 7in, 14in by 5¼in, 15in by 5in, 14in or 15in or 16in or 18in by 6in, 20in by 6¼in, 20in by 7¼in, 10in or 12in or 14in or 18in by 8in	10/- per ton
5in by 4¼in, 7in by 3¼in, 13in by 5in	15/- do.
12in by 5in, 22in by 7in	20/- do.
6in by 4¼in, 7in or 8in or 9in by 4in, 10in by 5in	25/- do.
4in by 3in, 10in by 4¼in	30/- do.
5in by 2¼in, 5in by 3in	35/- do.
6in by 3in, 24in by 7¼in	40/- do.
3in by 3in	50/- do.
4¾in by 1¾in	65/- do.
3in by 1¼in, 4in by 1¾in	70/- do.
1in mild steel reinforcing rods ex mill d/d	£41/9/0 do.
Extras per ton	
⅞in or ¾in diameter in size	15/- per ton
⅝in	30/- do.
½in	62/6 do.
⅜in	92/6 do.
7/16in	132/6 do.
¼in	172/6 do.
Extras for length	
5ft to 3ft	7/6 do.
3ft to 2ft	15/- do.
2ft	22/6 do.
40ft to 45ft	15/- do.
45ft to 50ft	22/5 do.
Bolt and Nuts	112/- per cwt
Trench covering, including trays 1¼in deep and rebated frames, 9in wide	25/- foot run
Do., but 12in wide	27/- do.
Do., but 14in wide	30/- do.
Do., but 18in wide	39/- do.

METAL SUNDRIES

Cast iron pavement lights with 4in by 3in prism and convex lenses in alternate rows	per 33/- ft super
Iron single fire doors, panelled both sides, pivot hung and self closing, to angle frame rebated and lugged, to meet fire regulations	54/- do.
24 gauge galvanized Tallboy 6ft high, 9in diameter with 9in by 12in base	55/- each

CHAIN LINK FENCING—

In 25 yards lineal rolls inclusive of line wire.

2in mesh	Height in inches— 36	42	48	60	72
10½in wire gauge	126/-	147/-	168/-	210/3	252/3
12½ do.	87/6	102/6	117/-	146/3	175/6
14½ do.	61/3	71/9	81/6	102/6	122/6

DOUBLE SOOT DOORS AND FRAMES—

Fitted with brass turn-buckle and cast key	9in by 9in	12 in by 9in	14in by 12in
	21/6	31/3	54/-

SLIDING DOORS, GATES AND PARTITIONS—

Factory sliding doors in two leaves containing about 100sq ft with mild steel angle frames covered with 24 gauge corrugated galvanized sheeting and including hanging tubular track and gear complete	18/6 ft super
Factory entrance gates with mild steel frames clad with 2in mesh chain link complete	16/6 do.

STEEL ROOF LIGHTS—

In Skylights and Lanterns, Standard type with puttyless glazing, lead flashings, and ¼in rough cast glass; in the case of Lanterns 18in vertical sashed sides are provided in addition.

Size at Base	6ft by 4ft	8ft by 6ft	10ft by 8ft
Skylights	£35 5	£50 10	£69 10
Lanterns	£55	£76 5	£110

HIGH GRADE DOMESTIC BOILERS—

Coke Fed. Performance 20 to 40 gallons raised from 40°F to 140°F per hour as under.

TYPE		£ s. d.
20 gallons per hour 15in wide, 23in high	Enamel finish	11 10 0
25 gallons per hour 17in wide, 26in high	Do. Grey Mottle	20 10 0
	Do. Cream Mottle	22 0 0
40 Gallons per hour 22in wide, 30in high	Do. Cream Mottle	38 0 0

GAS, WATER AND STEAM TUBES

BASIC PRICES

Internal Diameter—	⅛in & ¼in	⅜in	½in	¾in	1in	1¼in	1½in	2in
Tubes per ft	9¾*d*	10*d*	1/-	1/2½	1/9	2/3	2/8	3/9
Bends each	1/7	1/9	2/-	2/6	3/8	5/5	6/2	10/7
Elbows, sq. do.	1/8	1/10	2/2	2/6	3/-	4/4	5/2	8/6
Do., round do.	1/10	2/-	2/4	2/10	3/4	4/8	5/8	9/4
Tees do.	2/-	2/2	2/6	3/2	3/8	5/-	6/2	10/2
Crosses do.	4/4	4/8	5/6	6/6	8/2	11/-	13/2	21/-
Backnuts do.	4*d*	4*d*	6*d*	7*d*	10*d*	1/-	1/4	2/2
Sockets do.	6*d*	6*d*	8*d*	10*d*	1/-	1/4	1/9	2/6
Sockets dimin. do.	8*d*	10*d*	1/-	1/2	1/6	2/-	2/8	4/-

EX. STOCK IN ORDERS OF £10 OR MORE

DISCOUNTS OFF BASIC LIST.

TUBE—

Black	Galvanized
Medium (Blue)—35%	Medium—25%
Heavy (Red) —25%	Heavy —15%

FITTINGS—

Black	Galvanized
Heavy —10%	Heavy —2½%

RAINWATER GOODS (Painted or Unpainted

In consignments of 5cwt and over

From Standard List

Pipe:		2in	3in	4in	5in	6in
6ft lengths	each	12/10	14/5	18/11	24/8	31/6
3ft do.	do.	7/-	7/9	10/-	13/1	16/6
Shoe, ordinary	do.	2/7	3/10	5/7	9/5	12/11
Bend	do.	3/1	4/4	6/4	11/3	14/7
Branch, single	do.	4/6	6/7	9/3	14/7	22/6
Offset, 4½in	do.	3/9	5/3	7/9	12/11	17/-
Do. 9in	do.	4/11	6/6	9/8	15/3	19/3
H.R. gutter, 6ft length	do.	—	6/-	8/5	10/4	13/10
Angle or nozzle	do.	—	2/6	3/1	3/9	5/4
Stop end	do.	—	9*d*	1/1	1/6	1/9

Above plus 22½%

CURRENT MARKET PRICES (Continued)

PLASTERING MATERIALS

Sand, lime, cement and various plasters are previously included under those heads—

Metal lathing (⅜in by 24G) (20 yards)		4/– sq yard
Plaster baseboard ½in (1,200 yards) ex works		2/4 do.
Lath nails, galvanized		1/11 lb
White glazed tiles (6in by 6in by ⅛in)	small quantity	25/3sq yard
Do. rounded on one edge	small quantity	30/6 do.
Do. on two adjoining edges	small quantity	33/9 do.

PLUMBER'S GOODS

4lb lead sheet (in 1-ton lots)	109/– per cwt
Lead water pipe in coils (do.)	111/3 do.
Plumber's solder	3/6 lb
Copper tacks	6/– do.

IRON SOIL AND WASTE PIPE. (5cwt lots and up)

each	2in	3in	3½in	4in
⅛in Medium pipe, 6ft length	14/6	17/2	19/3	21/11
Do., 4ft length	10/5	12/2	13/7	15/5
Bends	5/4	6/6	8/1	9/1
Do., with oval door	17/4	18/6	2.	[illegible]/7
Junction, single	6/6	9/8	11/3	13/3
Do., with oval door	18/6	21/8	24/3	26/3
Swan necks, 4½in	6/6	10/3	11/9	13/9
Do., 9in	8/8	11/9	13/9	16/1
Holderbat, 2¼in projection	5/9	5/11	6/3	6/4

Above plus 22½%

GALVANIZED CISTERNS, TANKS AND CYLINDERS—

(Less than three)

each gallons	Nominal capacity			
CISTERNS				
Bends over tops and corner plates. Riveted or welded	100	150	200	300
14 gauge	150/–	218/–	274/–	387/–
12 gauge	182/–	270/–	319/–	429/–
⅛in plate	270/–	314/–	369/–	501/–
HOT WATER TANKS				
Riveted and with hand hole and ring	20	25	30	40
12 gauge	137/–	140/–	152/–	175/–
⅛in plate	153/–	156/–	171/–	195/–
HOT WATER CYLINDERS—				
Riveted, with handhole and ring	20	25	33	39
12 gauge	155/–	169/–	188/–	203/–
⅛in plate	167/–	185/–	207/–	222/–

PLUMBER'S BRASSWORK, etc.

Each

	½in	¾in	1in	1½in
Boiler screws, single nut	1/6½	1/11½	3/3½	5/7
Do., double nut	2/2	2/9	5/2½	7/2
Cap and lining	1/1½	1/6½	1/10½	2/0½
Plumber's unions	2/4	2/11	4/–	7/1
Ball valves, screwed iron	13/7	21/1	—	—
Do., fly nut and union	14/7	22/7	—	—
Bib valves, crutch top screwed iron	8/3	12/3	—	—
Do., but screwed boss	9/5	13/10	—	—
Stop valves, screwed iron	7/3	10/–	—	—
Do., screwed iron and union	9/–	13/3	27/–	—
Do., double union	10/3	14/6	29/3	—
Waste, plug chain and stay	—	—	8/–	9/–
	1¼in	1½in	2in	4in
Caps and screws	3/3	4/2	6/–	—
Sleeves, long	—	—	7/4	10/7
Do., short	—	4/–	4/2	8/4
Thimble	—	3/9	4/6	10/6
Full way gate valves, hot pressed	20/6	28/6	—	—
		1¼in	1½in	2in
Lead 7lb P. trap		6/7	8/7	12/–
Do., S. trap		8/1	10/8	14/11
Lead 6lb P. traps with 3in seal		7/4	8/10	—
Do., but S. traps, do.		9/1	11/2	—

Wire balloon guards, copper, 2in, 3/3; 4in 3/6
Do., galvanized iron, 2in 1/11; 4in 2/1
Hair felt 34in by 30in, 24oz, 6/– sheet
Boss white jointing compound, 2/3lb
Gasket 1/10½lb. Hemp, 9/–lb.

COPPER TUBES—Extract from B.S. 659/1955—

Nominal bore	Internal work (semi-hard). Outside diameter	Gauge	Weight lb per ft	3cwt lots Price per lb pence	Price per ft pence
¼in	0.596	19	0.27	41¼	11.32
⅜in	0.846	19	0.39	40½	15.65
1in	1.112	18	0.62	38⅝	23.95
1¼in	1.362	18	0.76	38	28.88
1½in	1.612	18	0.91	38	34.58
2in	2.128	17	1.40	39¾	55.48

CAPILLARY TYPE CONNECTIONS—

Add for delivery and packing on orders under £10.

All ends copper to copper

Each	½in	¾in	1in	1½in	1¼in	2in
Straight	1/11	2/8½	4/3	5/6	7/6	10/9
Elbow	3/10	4/9½	6/4	8/1	13/–	26/6
Tees	4/7½	5/5	8/7½	12/9	18/–	26/6
Brackets (Brass)	2/–	2/4	2/7	—	—	—

GLASS

	Per foot superficial 24oz	26oz	32oz
English, flat drawn sheet glass cut to sizes in squares	10⅞*d*	1/1½	1/5½
Figured rolled, white cut to sizes, in squares (½in) Group 1	1/1½*d* Per ft super		
Figured rolled, white cut to sizes, in squares (½in) Group 2	1/4½	do.	
Ditto, but in standard tints	1/10	do.	
⅛in Rolled, cut to size, in squares	1/1½*d*	do.	
¼in rough cast do.	1/5½	do.	
¼in do. wired do.	1/9½	do.	
Georgian wired do.	1/9½	do.	
Fluted (No. 4) do.	1/11½	do.	
⅛in Reeded	2/3	do.	
⅛in Reedlyte (narrow and broad) do.	1/6	do.	
Spotlyte do.	1/6	do.	
⅛in Calorex Cast do.	1/8	do.	
Flashed Opal (15/18oz) up to 1ft super	4/2	do.	
do. do. over 1ft super	5/–	do.	
Pot Opal (15/18oz) up to 1ft super	4/2	do.	
do. do. over 1 ft super	5/–	do.	

POLISHED PLATE GLASS (Tariff) Cut to sizes.

Ordinary substance ⅛in and ¼in thick.

Per Superficial ft	General Glazing
In plates not exceeding:	
2ft super in each	4/7
5ft do.	5/7
45ft do. (unless extra sizes)	6/9
100ft do. (do.)	7/4

Extra sizes, i.e., Plates exceeding 100ft super or 160in one way or 96in both ways at higher prices.

DECORATING MATERIAL

	Price	Unit
Aluminium Paint	41/–	Gallon
Distemper, ceiling	38/–	Cwt
Distemper, washable	120/–	do.
Enamel	60/–	Gallon
Gold Metallic Paint	79/–	do.
Heat Resisting Paint	50/–	do.
Japan, black	35/–	do.
Knotting	50/–	do.
Linseed Oil	15/–	do.
Boiled, do.	15/9	do.
Proprietary Paints (good class)—		
Finishing	57/6	do.
Priming	62/–	do.
Undercoat	57/–	do.
Paperhanger's Paste	36/6	Cwt
Petrifying liquid	10/–	Gallon
Putty	52/6	Cwt
Size	12/3	Firkin
Terebine	37/–	Gallon
Turpentine substitute	6/5	do.
Varnish, oak, copal inside use	45/–	do.
Do., do., outside use	45/–	do.
Do., white, eggshell, flat	54/6	do.
White lead mixed paint	66/6	do.
White lead	167/6	Cw.
Whiting	13/3	dot

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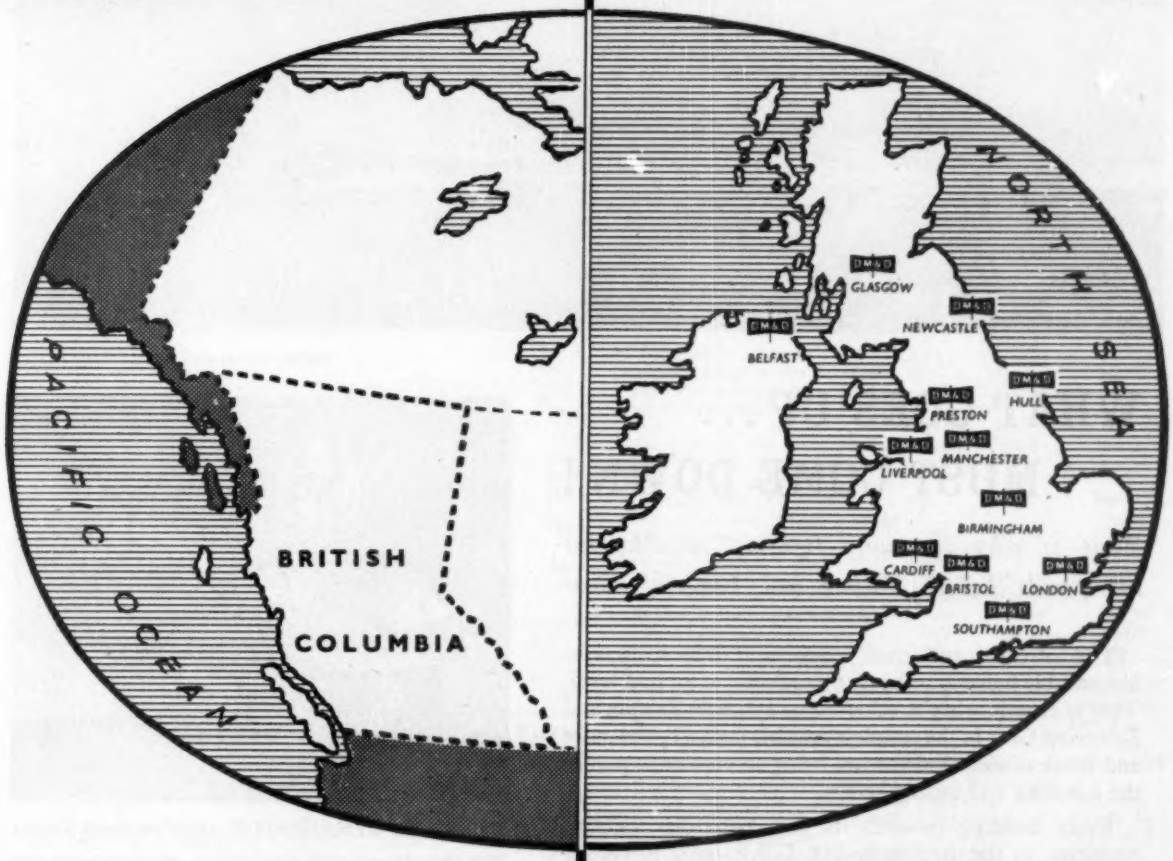

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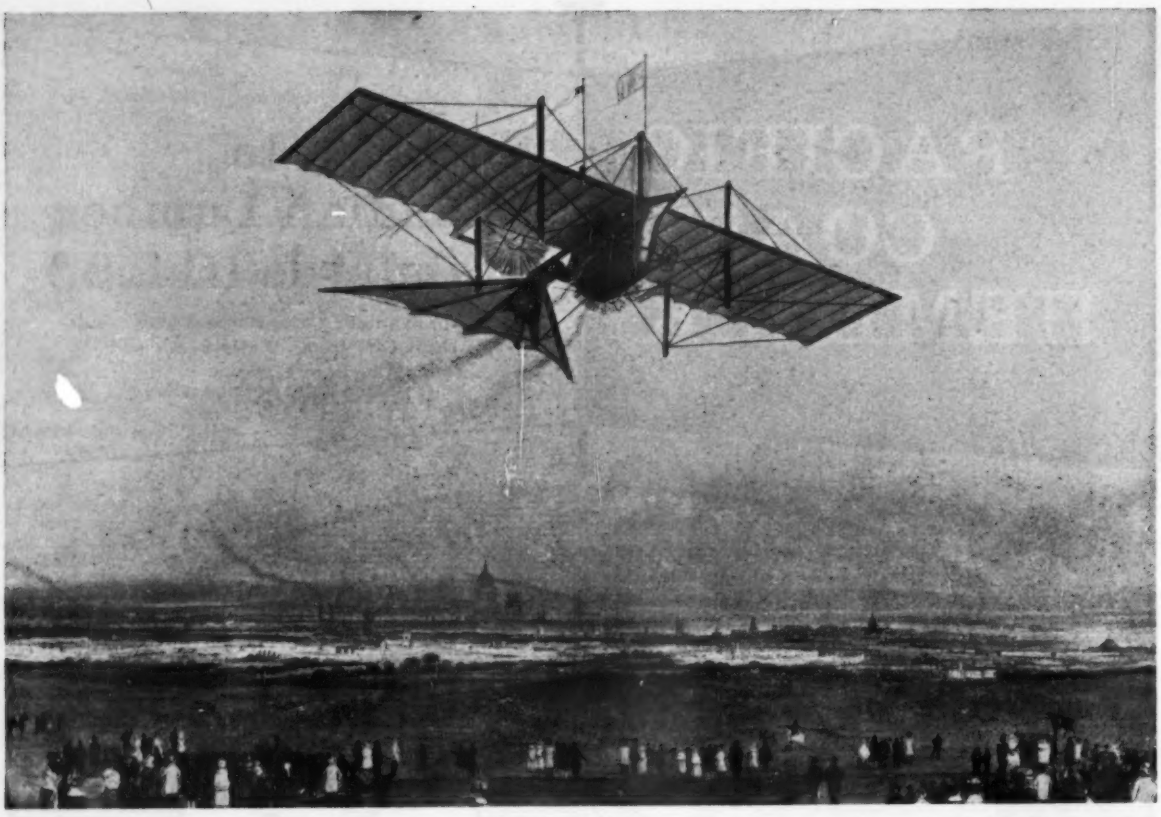

The first carriage of the Aerial Transit Co., 1843

WHAT GOES UP...
MUST COME DOWN!

That is why so many lighting installations incorporate L.E.F. Raising and Lowering Gear

The obvious and most convenient way to service inaccessible lights is to bring them down to ground level. That is exactly what is achieved with L.E.F. Raising and Lowering Gear in the simplest possible manner—the make and break of electrical contact being an automatic part of the lowering and raising action.

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L.E.F. Raising and Lowering Gear is designed for both interior and exterior lighting and is installed in many well known buildings and street lighting systems.

CENTRAL SYNAGOGUE, Gt. Portland Street

The three 5-cwt. and eight 1-cwt. chandeliers in this building are serviced by means of L.E.F. Raising and Lowering Gear which is built unobtrusively into the ceiling. This is a further example of where early consultation with L.E.F. produced the desired result.

Architects: C. Edmund Wilford & Son.
Electrical Contractors: Freeman Electrical Company (London) Ltd.
Lighting Manufacturers: George Forrest & Son Ltd.

LONDON ELECTRIC FIRM LTD., South Croydon, Surrey. Telephone: Uplands 4871

Tib. 113

CURRENT MEASURED RATES (LONDON)

These apply to new work of normal character and some size. These rates are for time and materials only and carry 10 per cent in excess, so the appropriate essential on-costs should be added. The basis cost of material used in the calculation of these prices is taken from the foregoing tables which carried up to August 5, 1959

(COPYRIGHT)

ESSENTIAL ON-COSTS

Fees payable to L.C.C. for District Surveyor:

The new buildings of ordinary construction not exceeding 5,000 cubic feet	£3
Over 5,000 cubic feet for every extra 1,000 cubic feet up to 1,000 cubic feet add	4/–
Buildings over four storeys add 3*d* per 1,000 cubic feet extra for each storey up to eight	3*d*

ALTERATIONS AND ADDITIONS

Up to £100 cost		£3
Over £100 up to £1,000.—	Per £100 cost	15/–
Over £1,000 up to £5,000.—	Ditto	5/–
Over £5,000	Ditto	3/–

Public buildings add 50%

Steel framed or R.C. buildings.—See L.C.C. (General Powers Act 1955) also fees in respect of means of escape in case of fire.

Allowance to cover National Insurances, Holidays with Pay and Public Holidays, Welfare, Third Party Risk, Travelling and Guaranteed Week is made in the rates attached to the items.	
Allow for Fire Insurance	1/6%
Allow for Water for use on the works and apparatus	5/–%
Allow for hoarding, or similar licences in City of London	say £10
Do. under Borough Councils per each month	say 2/6
Allow for Office, Fire, Attendance on C. of W., etc. p. week	say 30/–

ADMINISTRATION AND CONTROL

Percentage costs on normal contracts in accordance with Builders Turnover per Annum see appropriate column hereunder:

	Turnover in Thousands			
Place	25	50	75	100
At depot	13%	9%	7%	6%
On job	6%	5½%	4½%	4%

SPOT ITEMS AND DEMOLITION, ETC.

	Per ft run
Hoarding erected and removed	20/–
Planked gangway with handrail, etc. do.	10/–
Proper gantry do.	78/–
Sleeper roadways	16/6
Needling, strutting and shoring including all labours and use and waste in erection and removal	Per ft cube 20/–

ALTERATION-DEMOLITION—	1 Brick (Per ft super)	1½ Brick	2 Brick	Per yard cube
Cutting out cement concrete or brickwork in small quantities	1/3	2/6	3/7	64/–
Do. if either in very small quantities or reinforced	2/2	4/1	6/–	95/–
Debris into baskets and removed from inside to outside of bldg.	3½*d*	7*d*	9*d*	14/–

SCAFFOLDING (Avg. 45ft high)

Per yard superficial	Period 1 month	3 months	5 months
Putlog type—4ft 6in lift	7/2	9/7	12/5
Do. —6ft 0in do.	5/1	7/4	9/5
Independent type—4ft 6in lift	9/5	13/4	17/2
Do. —6ft 0in do.	6/7	9/6	11/10

EXCAVATION Per Yard Cube *By hand*	Common Soil	Loamy Clay	Gravel or Clay	Rock or similar
Reducing levels	7/–	8/4	9/9	64/3
Surface trench not exceeding 5ft deep	14/1	16/10	22/5	79/10
Do. from 5ft to 10ft	25/9	28/11	34/7	87/2
Do. from 10ft to 15ft	29/3	34/10	40/11	95/4
Fill in and ram	5/9	6/4	6/4	6/2
Barrowing 25yd	3/3	3/7	3/7	4/2
Load vehicles and tip 8 miles away;	17/9	17/9	18/9	19/7

PLANK AND STRUT	To 5ft deep	5 to 10ft deep	10 to 15ft deep
To trenches, in normal ground			
Per Ft Super	7*d*	8½*d*	10*d*

CONCRETE 1½in Ballast Aggregate	Per yard cube
1 : 3 : 6 Cement concrete in foundations	80/–
Do. around grillages	83/–

REINFORCED CONCRETE

1 : 2 : 4—¾in concrete, worked around reinforcement, between formwork in the following (at various levels):—	Per cubic yard
Foundations and surface beds	89/9
Walls, 12in thick or more	96/–

Sectional inches	Lintols and beams	Columns and casings	Braces and projections	
Up to 36	4/10	5/–	5/2	Per cubic ft
36 to 72	4/9	4/11	5/1	do.
72 to 144	4/8	4/10	5/–	do.
over 144	4/6	4/8	4/10	do.
Walls 6in thick			19/9	Per super yd
Do. 9in thick			29/1	do.
Suspended floors average 6in thick			19/8	do.

REINFORCING RODS (round) bent and placed. (Ex Mills)— Per cwt	¼in	⅜in	½in	⅝ to 1in
In floors and beams	92/–	80/–	75/9	67/6
In walls	98/–	85/–	79/9	70/6
In columns	105/6	90/3	81/–	73/9

FORMWORK and Supports (4 times use)— Floor soffits	Beams	Walls	Columns
20/3 per yard	3/–	2/8	2/8 per super ft

BRICKWORK

BRICKWORK per YARD superficial reduced to ONE BRICK in thickness (scaffold to add)—	In 1 : 3 cement mortar
Flettons or other similar *at* 118/– per 1,000	42/–
Mild Stocks or do., *at* 245/– per 1,000	57/9
Second Stocks or do., *at* 323/– per 1,000	66/–
Southwater engineering or similar bricks, *at* 400/6 per 1,000	78/–
Blue Staffordshire wire cut *at* 542/6 per 1,000	94/3
Deduct if 1 : 1 : 6 Cement-Lime mortar is used in lieu of 1 : 3 Portland Cement mortar	2*d*
Add if brickwork commences above ground level	4/9
Do. if in backing to masonry including cutting and waste for bonding	3/10
Do. If circular-on-plan	9/–
Do. If in underpinning	9/–

BRICKWORK IN THICKNESS NOT REDUCED— Per yard superficial	Brick, on edge walls	Half-Brick walls	1 Brick finished fair both sides	11in Hollow with 2in cavity and G.I. TIES
In Flettons or similar	18/3	23/4	43/1	49/3
In second stocks or do.	31/–	41/–	73/–	72/–
Add: for pointing as work proceeds, per side	1/9	1/11	1/9	1/9
Thickness to old walls, including cutting, toothing and bonding to same an average total thickness of ¾ brick	Fletton 57/–		Stock 72/–	Per yd super
Do. all as last but an average total thickness of 1½ bricks	78/–		102/6	do.

WALLS BUILT IN SUPERIOR BRICKS— In 1 : 3 Cement mortar, fair faced and pointed on both sides as the work proceeds:—	Half-Brick	One Brick	
In first quality Stocks at 349/–	44/–	73/–	Per yd super
In red facings at 330/–	38/6	67/9	do.
In blue pressed facings at 604/–	60/–	104/9	do.

GENERAL AND SUNDRY

Cut tooth and bond new brickwork to old		5/9 per ft
Damp proof course, double slate, horizontal		4/9 super
Do., as last, but vertical		5/9 do.
Do., bitumen, Hessian base, horizontal		1/– do.
Frames, bed and point in cement mortar, one side		4½*d* per ft run
Window board of 6in by 6in by ¾in rounded on edge quarry tiles, bedded, pointed, cut and fitted		4/3 do.
Terra-cotta air bricks built in and pointed, including flue	9in by 6in 6/6	9in by 9in 11/6 each
Chimney pots, plain red, set and flaunched in cement mortar	1ft high 17/–	2ft high 24/– each
Metal windows, assembled, hoisted and fixed, lugs cut and pinned and frames bedded and pointed one side in cement mortar	Up to 5ft super 15/2	5ft to 10ft super 18/9 each
	10ft to 20ft super 28/5	20ft to 40ft super 47/– each
Leaving holes through walls for pipes and afterwards making good	Small pipes 3*d* per in in depth	Large pipes 6*d* per in in depth
Cutting do., and afterwards do.	11*d* do.	2/– do.
Cut mortices in brickwork or concrete for bolts or dowels and run in with cement grout		1/3 per in in depth, each
Holdfasts of stout iron hoop bent, holed and screwed to frame and built in		1/7 each

MEASURED RATES—*Continued*

BRICKWORK—*Continued*

FACING—

Extra only over common brickwork (118/– per 1,000) for facing with superior bricks in *Flemish bond* and pointing as the work proceeds.

Rustic Flettons (150/–)	4/2 per yd super
White (220/–)	9/9 do.
First Stocks (349/–)	21/– do.
Reds (370/–)	20/9 do.
Blue pressed (604/–)	38/3 do.

If built in English bond, *Add* 12½% to above.
If do., half-brick stretcher bond, *Less* 25% off above.

COPING—

All labour and material in forming brick-on-edge coping with two course of roofing tiles under and cement weather fillets on both sides, built in cement and pointed as the work proceeds.

Per ft run	9in thick	14in thick
In picked Flettons	6/3	8/5
In first quality Stocks	8/–	12/–
In red facings	7/5	11/11

Plumbing angles	2*d* per ft run
Fair cutting	1/– do.
Fair rake cutting	1/7 do.
Fair circular cutting	1/7 do.
Fair squint or birdsmouth	1/11 do.

ARCHES

Extra over Fletton brickwork for forming window head with red facing bricks set on end and with 4½in soffits and pointing	ft run 3/9
Do. for rubbed and gauged flat arch in red rubbers set in putty with fine joints	ft super 19/–

PARTITIONS

(75 yards)	Per yd super— 2in	2½in	3in
Concrete slab partitions in cement mortar	11/4	13/5	14/5
Hollow clay do.	13/5	15/6	18/-
Cutting and bonding at angles, intersections and ends	5*d* ft run		

PAVING

	1in	1½in	1½in
Grano trowelled gauge 5 : 2	8/6	9/6	10/8 yd super
1 by 5in skirting, square top and cove bottom			2/10 ft run
½in by 6in red quarry tile paving			32/– yd super
½in by 6in do. skirting			1/11 ft run
Jointless flooring, ½in thick			20/– yd super

ASPHALT (normal conditions and fair quantity)

½in pitch mastic floor in one coat on felt underlay on prepared concrete base — B.S. 1450/48 | 1375/47

Per yd super	13/–	Brown 14/–	Red 15/9
	Unit	Mastic B.S.988	Natural Rock B.S.S.1162/44
½in in two thicknesses on felt underlay on prepared concrete base	yd super	15/–	22/–
Do. in narrow widths	ft super	2/6	3/3
½in skirting 6in high, angle fillet at bottom splayed and turned in at top	ft run	2/6	2/9
External angles	each	6*d*	6*d*
Internal do.	each	10*d*	10*d*
Tanking or Damp Course		B.S.1097/43	B.S.1418/47
Vertical in two thicknesses	yd super	22/6	27/–
½in horizontal do.	yd super	13/6	20/–
Vertical in three thicknesses	yd super	30/–	37/-
1½in horizontal do.	yd super	19/6	29/–
Labour rounded external angle	per ft run	6*d*	6*d*
Do. internal angle fillet	per ft run	10*d*	11*d*
Do. double do.	per ft run	1/8	1/8
Collars to small pipes	each	3/6	4/–
Do. to large pipes	each	6/6	8/–

DRAINAGE

Excavate trench, and plank and strut to sides, consolidate bottom to fall, return, fill and ram earth after drain is laid and load and remove surplus. In ordinary ground—moderately firm. (By hand)

Per lineal yd	
1ft in depth	5/10
2 do.	9/11
3 do.	22/9
4 do.	29/7
5 do.	36/6
6 do.	54/11
7 do.	67/6
8 do.	80/–
9 do.	92/6
10 do.	104/11
11 do.	128/1
12 do.	144/11

Portland cement concrete bed under pipes and benching both sides—6in thick	(1 : 6) drain up on	Per yd run 4in 18in wide 8/6	6in 20in wide 10/–	9in 23in wide 12/3

SALT GLAZED SANITARY DRAIN PIPES
and lay and joint with Yarn and Cement Mortar in trench.

Quality	Quantity	Per ft run 4in	6in	9in
"Best"	2ton or more	3/1	4/7	7/7
	50 pieces and over	3/5	5/3	8/6
	under 50 pieces	3/6	5/4	8/10
"Best Tested"	2ton or more	3/9	5/10	9/2½
	50 pieces and over	4/2	6/3	10/2
	under 50 pieces	4/3	6/5	10/10
"British Standard"	2ton or more	3/3	4/10	8/–
	50 pieces and over	3/8	5/6	9/–
	under 50 pieces	3/9	5/7	9/4
"British Standard Tested"	2ton or more	3/10	5/9	9/7
	50 pieces and over	4/5	6/8	11/–
	under 50 pieces	4/6	6/9	11/5
Extra for bends "Best"—Contained in 2ton lots		4/2	6/3	16/6
Extra for junction "Best"—4in on 4in—6in on 6in—9in on 9in	do.	6/6	9/9	27/–½

IRON DRAIN PIPES—

Heavy cast iron socketed and laying and jointing in molten lead—	Per ft run 4in	6in
In main runs	14/5	20/2
In branches	16/6	23/4
	each	
Extra over last for bends and extra joint	30/2	66/1
Do. on do. for junctions and extra joint	45/4	86/–
Cast-iron gulley with 10½ inlet and 4in outlet, composed of hooper and trap, and 9in extension piece and 10½in grating, and jointing all together, and jointing to drain and surrounding in concrete	183/–	—
Do. rain water, shoe with vertical inlet and inspection cover, and joint up and embed	85/9	143/6

MANHOLE SUNDRIES—

		4in	6in
Salt glazed straight half-round main channels	each	6/–	8/7
Do. curved	do.	14/–	20/–
Do. three-quarter section splayed channel bends (Barrons or similar)	do.	18/–	26/6
Heavy manhole steps galvanized	do.	9/9	—
Fix only manhole covers	do.	11/6	—
4in Mica flap, brass faced, f.a.i. valves and fix with molten lead joint	do.	41/–	—

ROOFER

CORRUGATED ASBESTOS SHEETS

P.C. 8/3¾ per super yd including side and end laps and fixing to wood	162/6 per square
Eaves filler pieces	2/6 ft run
Adjustable ridge	4/9 do.
Barge boards	3/4 do.
Plain roofing tiles, machine made, sand faced, 4in gauge nailed every 4th course with 1½in galvanized nails, to battens (measured separately)	263/– per square
Extra over last for top edge or abutment cutting	1/4 ft run
Do. for double course at eaves	2/5 do.
Do. for verges, undercloak, bed and point	3/9 do.
Do. Valley tiles including cutting and waste on both sides	11/3 do.
Do. Bonnet hips and do. bed and point	11/9 do.
Half-round ridge and bed and point	3/6 do.
Fixing soakers	1/8 dozen

Bituminous felt roofing in two layers, laid breaking joint and bedded with hot mastic and finished with fine dry grit	12/6 yd
Do. but in one layer only	9/– super

WELSH SLATING	Per square 16″+10″	18″+10″	20″+10″
3in lap, 2 zinc nails to each slate	341/–	356/–	414/–

Additional labours	Per ft lineal 1/9	1/10	2/2
At tops, verges and abutments—straight			
Do. —raking	2/7	2/9	3/1
At hips and valleys (each side)	2/7	2/9	3/1
At eaves, double course	3/6	3/8	4/2
Do. to falls	5/3	5/4	6/3

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GLASCRETE

CURTAIN WALLING

J. A. KING & Co. LTD.

181 Queen Victoria St., LONDON, E.C.4

Telephone: Central 5866

MEASURED RATES—*continued*

FLOORS AND FLATS

Hollow tile *in situ* or pre-cast units hoisted, bedded and fixed—

Superimposed load in lb per ft super	Span 12ft	Span 16ft
50 ..	44/9	52/9
Per yd super 100 ..	47/-	59/-
150 ..	53/9	67/3

20lb has been allowed to cover dead load in surface, finish.

Fair edge to slabs	9*d* per ft run
Splay cutting and waste	1/9 do.

CARPENTER AND JOINER

SOFTWOOD CARCASSING—

	per ft cube			
Labour, materials, waste nails, hoisting and fixing ..	Plates 19/2	Joists 20/8	Rafters 22/4	Trusses 25/6

FLOORING— Per square—	⅝in	1in	1¼in
Rough boarding	144/-	171/-	203/-
Softwood batten flooring, straight joints, splayed headings	146/6	167/6	206/-
Do. grooved and tongued	167/6	189/6	244/-

SKIRTING— Per ft superficial—	½in	⅝in	1in
Wrot softwood moulded skirting with grounds and backings plugged ..	4/-	4/8	5/3

Mitres to do. .. 3*d* per sectional in.
Fitted ends .. 2*d* do.

SASHES, fanlights, casements, borrowed lights, etc.—

Per ft super—	Without bars	With bars (2ft sup. in each square)
2in softwood rebated, moulded and fixed	3/6	6/5
Add if fitted with beads	6*d*	1/6
Add if hanging on butts	3/- each	

WINDOWS, hung on lines—

Softwood cased frames, 1in inner and outer linings, 1¼in pulley stiles, 2in sashes, oak sill ..

Per ft super	Overall size of frames— 6ft	21ft	32ft	44ft
Windows as described ..	21/6	12/-	9/-	7/-
Add if sashes in squares, about 2ft super in each	—	1/8	2/2	2/2
Extra for hanging sashes with lines, weights and axle pulleys	38/-	66/- each	77/-	88/-

FINISHINGS TO OPENINGS—

Per ft super—	⅝in	1in	1¼in	1½in
Softwood linings, tongued at angles and tongued to frame including grounds and backings	4/8	5/3	5/10	6/4
Add if crosstongued	8*d*	8*d*	8*d*	8*d*
Softwood wrot rounded on front edge and with tongue at back window board including groove in sill and bearers	3/10	4/4	5/-	5/6
Add for ends to last notched, returned and rounded	1/1	1/2	1/3	1/4

Per ft run—	Sectional area in in— 1	2	3	4	5	6
Softwood wrot and fixed in bearers, backings, grounds, fillets, and similar	4½*d*	7*d*	9½*d*	1/-	1/3	1/5
Add if in short lengths	2*d*	2*d*	2½*d*	2½*d*	3*d*	3*d*
„ if plugged to brickwork ..	6*d*	6*d*	6*d*	6*d*	6*d*	6*d*
„ if framed as in legs and bearers	3*d*	3*d*	4*d*	4*d*	6*d*	6*d*
„ if rebated or grooved or beaded	2*d*	2*d*	2*d*	2*d*	2*d*	2*d*
„ if chamfered or rounded edges				3*d*		
„ if moulded in architraves, capping, etc.				6*d*		

DOOR FRAMES— Per ft run	6in	8in	10in	12in	13½in
Per sectional in—					
Softwood, wrot, reb. & rdd. ..	2/3	2/8	3/2	3/6	3/10

DOORS—Per ft super	Number of panels— 1	2	3	4	5	6
2in Softwood square framed and flat panels, both sides, on butts ..	6/-	6/10	7/5	8/-	8/4	8/10
1½in do.	5/4	6/2	6/7	7/2	7/7	8/1
Add for each side moulded	3*d*	4*d*	5*d*	6*d*	7*d*	8*d*
Add B.S. flush panelled	1/6	1/6	1/6½	1/7	1/8	1/8

Per ft super—	⅝in	1in	1¼in	1½in
In shelves, table tops, wrot and fixed	2/5	2/9	3/4	3/9
Do. in divisions and ends framed ..	2/9	3/1	3/8	4/3
Add if crosstongued	6*d*	6*d*	6*d*	6*d*
Add if buttoned	6*d*	6*d*	6*d*	6*d*

SUNDRIES—Per ft run—	In short lengths	In long lengths	Add for cups and screws
Glazing, beads mitred around and fixed with beads	6*d*	4*d*	2*d*
Rounded heel or hollow		4*d*	
Tongued and grooved angle ..		6*d*	
Glue blocking		6*d*	
Mitres	3*d*	per sectional in	
Fitted ends	2*d*	do.	

STAIRCASE—	Per ft super	
1¼in Softwood treads with moulded nosings 1in risers tongued both edges and glued, blocked and bracketed on and including two fir framed carriages	6/6	
Do. but in winders	8/-	
1¼in crosstongued landing on framed carriages	6/3	
2in moulded string	5/6	
2in do. ramped	14/-	
Ends framed to newel	10/-	each
Tongued heading joints	6/-	do.
Ends of treads and risers housed to string ..	3/6	do.
Extra for curtail ends to steps, glued up and veneered riser and solid blocking	100/-	do.
Balusters about 2ft 9in long, square and framed each end .. .. each	1in 2/6	1¼in 3/1	1½in 3/6
3½in by 3½in square newel, framed ..	4/- per ft run	
African mahogany moulded 3in by 2in hand-rail. (Joints below)	9/3	
Do. ramped 18in girth (do.)	54/- each	
Do. wreathed do. (do.)	160/-	do.
Joint or framed ends	12/-	do.

FIXING ONLY IRONMONGERY	To deal	To hardboard
Barrel bolts	1/10	2/9 each
Flush bolts	5/6	4/10 do.
Sash fasteners	2/6	3/- do.
Rim locks and furniture	4/6	6/- do.
Mortice locks and do.	7/6	17/9 do.
Cupboard locks	2/9	3/5 do.
Casement fasteners	2/3	2/9 do.
Do. stays	2/3	2/9 do.
Grip handles	2/7	3/5 do.
Spring catches	2/3	2/9 do.
Cabin hooks	1/10	2/5 do.
Floor springs including oil	49/-	63/- do.
Overhead springs	14/7	20/- do.
Springhinges	14/-	19/- do.

SMITH AND FOUNDER

Basis framed steel joists and hoist and fix	81/6 per cwt
Do. but in compound girders ..	91/6 do.
Do. but in stanchions	93/6 do.
Trusses	130/6 do.
Additional cost per cwt over basic sections for following R.S.J.s 9in by 7in, 10in by 8in, 12in by 8in, 14in by 8in, 16in by 8in, 18in by 6in, 18in by 7in, 20in by 6½in, 20in by 7½in	8*d* per cwt
22in by 7in, 1/1 cwt 4in by 3in	1/10 do.
5in by 3in, 5in by 2½in	2/2½ do.
6in by 3in, 24in by 7½in	2/6 do.
3in by 3in, 2/9 cwt 4½in by 1½in ..	4/- do.
3in by 1½in	4/4 do.
Cleats, brackets, packing pieces, etc., in connections, including rivets and bolts	174/- do.
Forged straps	132/- do.
Wrot iron balustrade	175/- do.

RAINWATER GOODS—

Round cast-iron pipe with socketed joints caulked with red lead and tow and fixing with pipe nails and gas barrel distance pieces to plugs in brickwork	Per ft lineal 2in	3in	4in
Extra for shoes .. .. .. each	5/7	7/2	10/3
Do. junctions .. .. do.	8/5	10/9	15/7
Do. bends .. .. .. do.	6/7	8/6	10/10

RAINWATER GUTTERS Per ft. run—	4in	5in	6in
Half round CI gutters jointed in red lead and bolted and fixed on iron brackets	3/11	4/8	5/9
Ogee do. All as last	4/4	5/-	6/3
Extra for stop ends	3/2	3/10	4/-
Do. angles or outlets	5/6	7/-	8/4

MEASURED RATES—*continued*

PLUMBER

EXTERNAL—	Soakers	Flats	Flashings
4lb Milled Sheet lead per cwt	147/-	188/-	200/-

LEAD PIPES: running joints, etc.

Per ft run		½in	¾in	1in	1¼in	1½in	2in
Main	Fixed	4/5	6/0½	8/3	10/5½	13/5½	17/11
Service	with	3/11	5/3½	7/-	8/7	10/10½	14/2
Waste	hooks	2/9	3/10	5/-	7/4	7/11	10/1
Bends	each	—	—	—	1/9	3/-	8/-
Solder joints	do.	9/8	11/8	13/5	13/8	18/2	23/8
Union and joints	do.	13/10	16/9	20/6	26/2	—	—
Stop valve and *do.*	do.	27/10	37/10	52/-	82/6	—	—
Bib valve and *do.*	do.	19/4	26/7	—	—	—	—
Ball valve and *do.*	do.	26/4	36/-	51/9	79/-	—	—
Sleeve and *do.*	do.	—	—	—	—	21/3	29/3

COPPER TUBES

	½in	¾in	1in	1¼in	1½in	2in
Tubes per ft run ..	2/9	3/4	4/5	5/3	6/1	8/9
Couplings: straight each	3/7	4/4½	6/7	8/6	11/-	15/-
Do. Elbows each ..	5/8	6/8½	8/10	11/3	16/9	32/4
Do. Tees do.	8/3	9/7	13/10	19/-	25/6	32/-
Do. Cisterns do. ..	4/8	6/3	8/4	10/6	14/4	18/11
Stop cocks do. ..	24/4	35/4	63/-	104/6	159/-	240/-

BLACK TUBING (Heavy)

	½in	¾in	1in	1¼in	1½in	2in
fixed with pipe brackets Tubes, per ft run ..	2/4	2/8	3/3	4/1	4/9	6/10
Bends and fix, each ..	5/1	5/10	7/10	10/5	12/1	18/3
Tees and do.	5/7	6/7	7/11	10/-	12/1	17/9
Fire bends	2/-	2/6	2/9	3/-	4/-	7/3

	2in	4in	
Coated iron (M) weight L.C.C. soil and waste fixed with nails and pieces and molten lead joints ..	5/9	8/4	ft run
Extra only for bends and joint ..	14/9	23/8	each
Do. junctions and joints	16/4	29/9	do.
Do. cleaning doors	16/-	17/6	do.
Domical wire guards	2/6	2/9	do.

PLASTERER—

			yd super
Lime and hair	½in	Render and set	7/-
Do.	1½in	Do. float and set	10/-
Sirapite	½in	Skimming coat	4/-
Do.	½in	Render and set	8/2
Do.	¾in	Render, float and set	10/2
Portland	½in	Backing coat	4/10
Do.	½in	Plain face	8/3
Do.	½in	Floor screed	5/-
Keenes	½in	Skimming coat	5/3
Dubbing	½in	Thick or less	3/-
Metal Lathing	½in	mesh by 24 Gauge	7/-

6in by 6in by ¼in Earthenware Plain Glazed Tiles, in fair quantity white, and setting (on prepared screed) .. 45/-
Rounded edge. Extra over last .. .. .. 6*d* per ft run
Angles in do. .. .. 6*d* each
Cutting and fitting. Around pipes or clips .. 1/6 do.
Narrow widths. 3in to 6in wide. Add 75 per cent to plain surface.
Do. 6in to 12in do. Add 40 per cent to plain surface.
Sundry labours per ft lineal:—
Quirk 3*d*. Arris 4*d*. Fair edge 3*d*. Rounded edge 5*d*.
Flush bead 1/9.
Mouldings—6*d* per in girth.
Jointing new plastering to old 4*d*.

POLISHING	Ft super	6" Girth Ft run
NEW WORK—		
Staining, bodying-in and French Polish	3/-	2/-
Staining and wax polishing on hardwood	1/6	1/-
OLD WORK—		
Cleaning down old work and repolish	1/4	—
Stripping, preparing and repolishing ..	3/4	2/3

INTERNAL PAINTING
With white lead base in common colours, with brushes.

	Knot stop and prime	Prime and paint once	Prime and paint twice	Add for each extra coat
ON WOOD—				
General surfaces	2/9½	5/7	8/-	2/4 yd super
Running lengths not exceeding 3in wide	4½*d*	8½*d*	1/-	3½*d* yd run
Do. 3in to 6in wide	5½*d*	11*d*	1/4	4½*d* do.
Do. 6in to 9in wide	9*d*	1/6	2/1	7½*d* do.
Do. 9in to 12in wide	11*d*	1/11	2/7	9½*d* do.
Sash square each side	5/5	10/3	14/11	4/4½ per do.
Do. in large squares	8/3	15/-	21/-	6/7 do.
Opening edges ..	7*d*	1/2	1/9	7*d* each
Casement frames each side	6*d*	1/-	1/4	5*d* yd run
Mullions or transoms do.	8*d*	1/5	2/-	7*d* do.

ON PLASTER—	One coat	Two coats	Three coats	
Paint on surfaces	3/1	5/10	8/3	per yd super
Do. on mouldings ..	3/5	6/5	9/2	do.
Do. on enrichment ..	6/2	11/8	16/6	do.
ON STEEL				
Paint on structural steel ..	2/5	4/7	6/10	do.
Do. on roof trusses ..	2/8	5/1	7/8	do.
Do. on metal windows measured over all on both sides, divided into squares	3/5	5/9	8/7	do.
Do. divided into large squares	2/10½	5/-	6/9	do.
Do. divided into extra large squares	2/5½	4/2	5/10	do.
Do. on opening edges ..	10*d*	1/6	2/-	each
Do. on rain water pipe ..	10*d*	1/6	2/2	yd run
Do. on do. gutter	1/3	2/8	3/7	do.
Do. on small pipe	3*d*	6*d*	10*d*	do.

GLAZING (to New Work)

Polished Plate Glass ordinary substance (about ¼in), glazing quality, in the following sizes, glazed complete—Per ft super
in plates not exceeding 2ft super in each 7/2
Do. 5ft do. 8/3
Do. (unless extra sizes) 45ft do. 9/7
Do. (unless extra sizes) 100ft do. 10/2
Add extra price for glazing with screw beads or clips 5*d* per ft super.
Do. if glazing bedded in washleather or velvet 9*d* per ft run.

SHEET GLASS, glazed, complete, per ft super, in new work: Ordinary quality clear, glazed to wood with putty:—

24oz as described			1/6½
26oz do.			1/9½
32oz do.			2/2
⅛ figured rolled, glazed to wood with putty	Group 1	Per ft super	1/9½
	Group 2	do.	2/1½
Do. in standard tints		do.	2/7
No. 4 Fluted, glazed do. ..		do.	2/8½
⅛in Reeded (narrow, broad, etc.)		do.	3/0½
Reedlyte do.		do.	2/2½
Spotlyte do.		do.	2/2½
¼in Rough cast do			2/2½
¼in do. wired do.		do.	2/6
¼in Georgian Rough Cast do. ..		do.	2/6½

Add for glazing all as before but to steel to similar work as above, 1½*d* per superficial ft.

PAINTER AND DECORATOR

DISTEMPERING—In common colours, put on with brushes—
ON PREPARED SURFACE

per yd super—	1 coat (finish)	2 coats (undercoat and finish)	*Add* if required Sealing coat	Stippling
Ordinary distemper on flat surface of plaster ..	10*d*	1/6	6*d*	3*d*
Washable do. on do. of plaster	1/-	1/10	6*d*	3*d*
Add if in margins, narrow widths or panels ..	30%	30%	20%	50%
Add if on mouldings ..	50%	50%	45%	—
Add if on enrichments ..	160%	160%	115%	—

PAPERHANGING

Hanging only—	Per Piece—Lining	Pattern
On walls	7/6	9/-
On stairs	10/3	12/-
On ceilings	9/-	10/6

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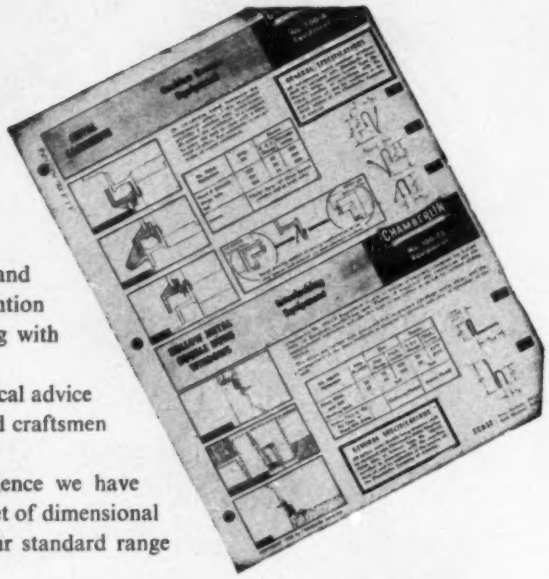

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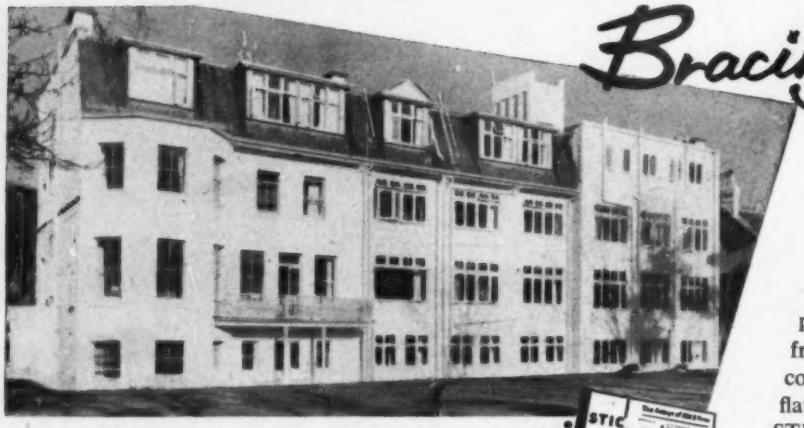

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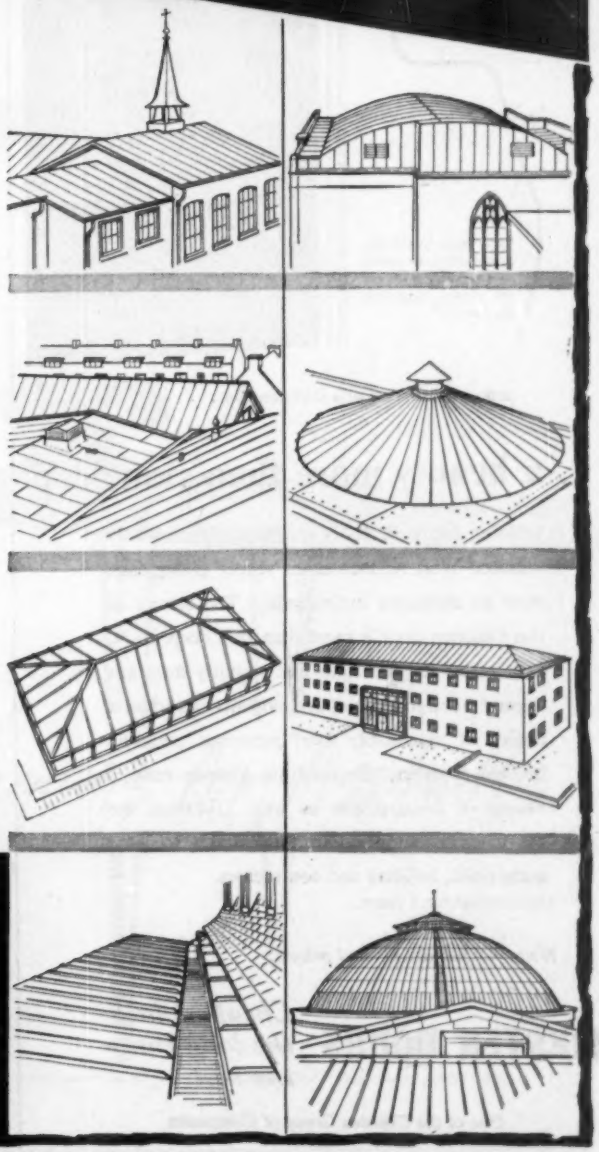

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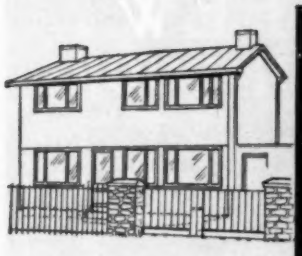

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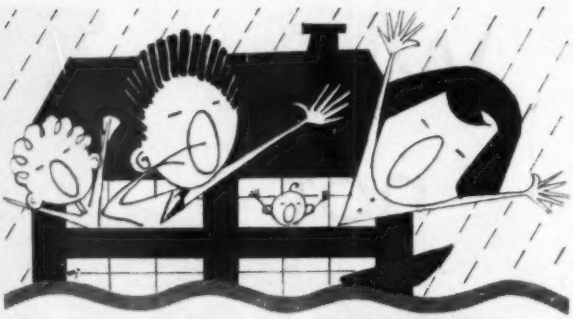

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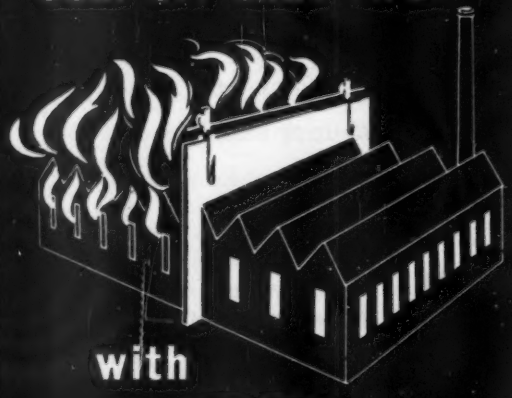

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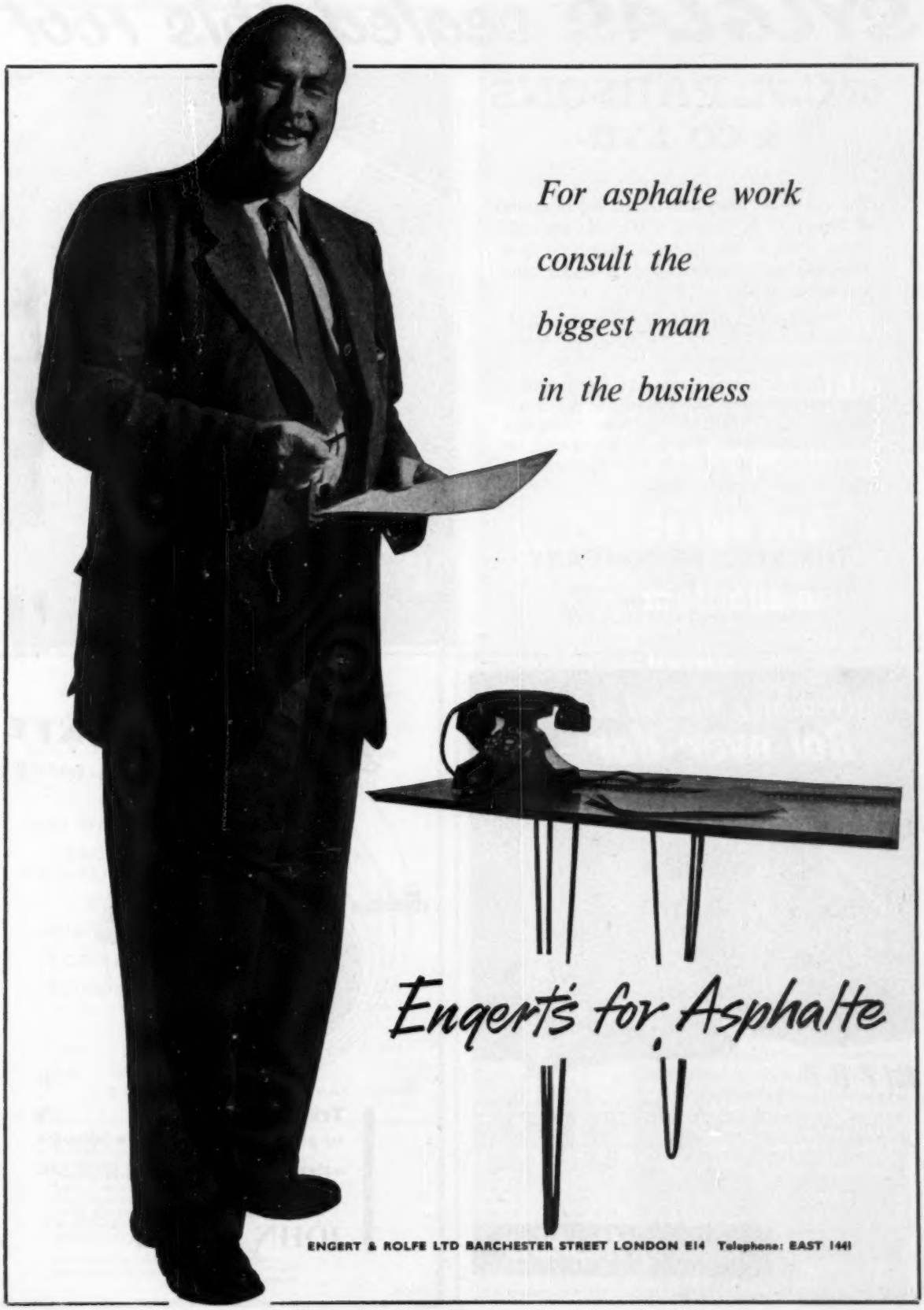
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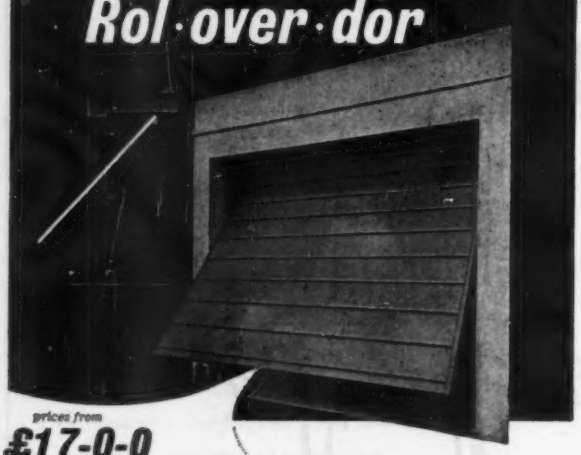
Rol·over·dor



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The Rol-over-dor is so perfectly balanced that it can be operated with extreme ease, yet in spite of this ease of operation, its all steel (galvanized), construction makes for great strength and gives maximum resistance against damage by knocks and other pressures.

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Full details and descriptive leaflet will be forwarded on request.

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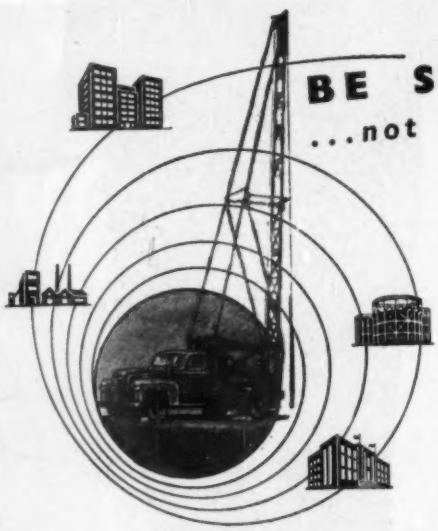

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NOT A FIRE HAZARD	fibres are treated to be self-extinguishing.
BACTERIA AND FUNGUS	highly resistant to attack by bacteria and fungus.
VERMIN	won't attract vermin or pests.
ODOURLESS	absolutely no smell.
ECONOMIC	low-priced.
BONDALAY	is supplied in rolls 21′ x 40″ x 1″ nominal, or in special sizes and weights to specification.

Send for further details from
British Celanese Limited, Foleshill Road, Coventry

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George Haynes & Co (1932) Limited
Hampstead Cotton Mills, Lake Street, Stockport
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SHCT-4

a competition for improving design and methods of fixing and joining ZINC EAVES GUTTERS

1st PRIZE £75

2nd PRIZE £25

Architects, technical teachers, students, building trades operatives and others are cordially invited to submit suggestions for improving the design and methods of fixing eaves gutters made from zinc sheet. Further details and conditions of entry may be obtained from the Zinc Development Association, 34 Berkeley Square, London W.1

The world's largest Generators will help to fill the demand for still more power

The development of nuclear energy for generating electricity is still front-page news. Less publicised, though no less outstanding, are new developments in "conventional" generating plant. The turbo-alternator shown here is a 550,000 kilowatt unit – twice the capacity of the next largest on order for the Central Electricity Generating Board. It has been designed for the projected new power station at Thorpe Marsh. For Blythe 'B', another new station, 275,000 kilowatt in-line units are on order. They will be powered by steam at 2,350 lb. per sq. in. and 1,050°F, with reheat to 1,000°F.

Nuclear power will play an important part in meeting the ever-increasing demand for electricity. Work is now in progress on the first three nuclear power stations, at Bradwell, Berkeley and Hinkley Point. By 1966/7 some 5 to 6 million kilowatts of nuclear-generated electric power will be available.

Though these projects will not be completed for some time, the Central Electricity Generating Board plays an important part in today's fight against inflation. Power stations are being built at a cost no greater than in 1948 – £50 per kilowatt installed. And, although the output of the industry has doubled since 1948, the increase in manpower is only about one-third.

By providing today for the power we shall need in years to come, the Central Electricity Generating Board is building a secure foundation for our future prosperity.

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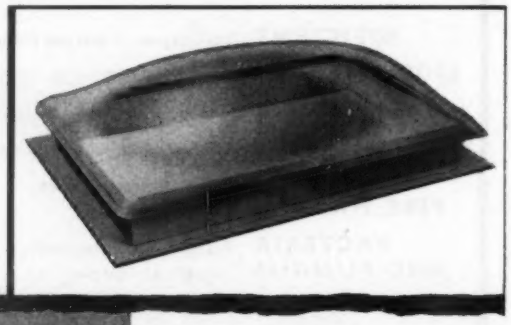

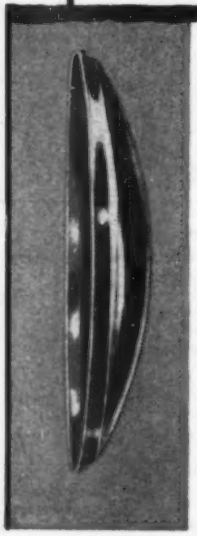

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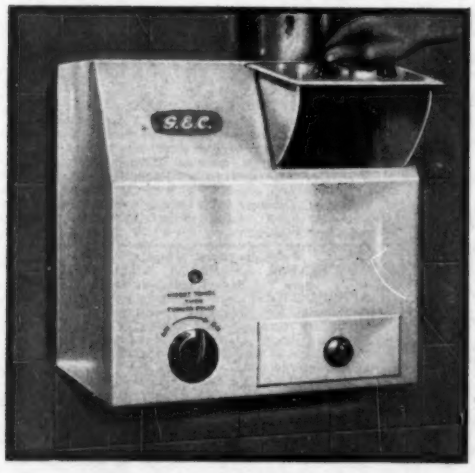

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OFFICIAL ANNOUNCEMENTS
APPOINTMENTS • CONTRACTS • TENDERS

Rate: 20/- per inch and pro rata, minimum half inch. Close for press 1st post Monday for following Wednesday Issue

APPOINTMENTS

University of Edinburgh
Department of Architecture

APPLICATIONS are invited for the post of Lecturer in the Department of Architecture. Salary scale £900 x £50—£1,000; Bar: £1,150 x £50—£1,350 x £75—£1,650 per annum, with placement according to qualifications and experience, and with superannuation benefit and family allowance where applicable. Candidates should have qualifications and experience in building construction and the supervision of building work. The successful candidate will be expected to take up duty on October 1, 1959.

Further particulars may be obtained from the undersigned, with whom applications, giving the names of two referees, should be lodged as soon as possible.

CHARLES H. STEWART,
Secretary to the University.

July, 1959. [5433

County Borough of Croydon
ARCHITECTURAL ASSISTANTS

APPLICATIONS are invited for appointments under the School Architect:

(a) Salary scale £640/£795 p.a.

(b) Salary scale £785/£910 p.a. Candidates for appointment on this scale must have passed the R.I.B.A. Intermediate Examination.

In both cases the salary will commence according to experience and rise subject to Final qualifications to £1,100 p.a.

Application forms from the Chief Education Officer, 19 Katharine Street, Croydon.

E. TABERNER,
Town Clerk.
[5434

City of Birmingham Education Committee
MATTHEW BOULTON TECHNICAL COLLEGE
Suffolk Street, Birmingham, 1
Principal: J. C. Martin, M.A., A.M.I.E.E., A.M.Brit.I.R.E.

APPLICATIONS are invited from suitably qualified persons for the following appointment in the Science and Building Department.

Assistant Grade "B".

The person appointed will be required to teach various subjects up to S.3 standard, namely in the Professional Building Courses (Civil and Municipal Engineering, R.I.C.S., Public Health Inspectors and Institute of Housing).

Applicants should possess a minimum qualification of Higher National Certificate in Building (either General Building or Quantity Surveying Sections) and should have had appropriate industrial experience.

(Salary in accordance with the Burnham Technical Scale: £682 10s x £26 5s—£1,076, plus additions and allowances as appropriate.)

Application forms and further particulars may be obtained from the Principal to whom the completed forms should be returned as soon as possible. [5436.

Government of Aden
ARCHITECT
Public Works Department

REQUIRED to design, prepare specifications and supervise construction of public buildings, housing and modern schools.

Contract appointment for one tour of 18-24 months.

Salary range £1,232/£2,044 per annum plus gratuity.

Free passages. Children's allowances. Furnished quarters at moderate rent. Generous home leave.

Candidates must be A.R.I.B.A. with at least one year's post qualification experience.

Write Director of Recruitment, Colonial Office, London, S.W.1, stating full names, age, qualifications and experience quoting BCD. 112/2/03/E1. [5437

County Borough of Croydon
SURVEYING ASSISTANT

APPLICATIONS are invited for this appointment under the School Architect from persons with the R.I.C.S. Final Examination and experienced in valuations for interim certificates, settlement of final accounts and some quantities.

Salary commencing according to qualifications and experience on the scale £1,095 p.a. to £1,250 p.a.

Application forms from Chief Education Officer, 19 Katharine Street, Croydon.

E. TABERNER,
Town Clerk.
[5438

Borough of Harrow
ARCHITECTURAL AND PLANNING STAFF

APPLICATIONS are invited for the following vacancies in the Department of the Borough Engineer and Surveyor within the Special Grade for qualified assistants (£785/£1,070 per annum, plus London Weighting):

(a) **Senior Planning Assistant.** This Assistant will deputize for the Head of the Planning Section, who is frequently engaged on inquiries and outside negotiations. Applicants must be appropriately qualified and should have extensive experience of development control.

(b) **Architectural Assistant.** Preference will be given to applicants who are Registered Architects.

Both appointments will be subject to the Local Government Superannuation Acts and the National Joint Council's Scheme of Conditions of Service. Housing accommodation is not offered. Contributions towards removal expenses will be considered.

Application forms, obtainable from me, must be returned not later than August 31, 1959.

D. H. PRITCHARD,
Town Clerk.

Town Clerk's Office,
Harrow Weald Lodge,
92 Uxbridge Road,
Harrow, Middlesex. [5443

Australia
The University of New South Wales
SENIOR LECTURER/LECTURER
School of Architecture

THE University invites applications for appointment to the position of Senior Lecturer/Lecturer in the School of Architecture.

Salary: Senior Lecturer, £A2,216 range £A2,566 per annum. Lecturer, £A1,516 range £A2,116 per annum.

Commencing salary according to qualifications and experience.

Applicants must possess a degree, diploma or equivalent qualifications and should have experience in the field of their speciality and be eligible for membership of their relevant professional institute.

Applicants must be qualified architects, structural or civil engineers or builders and will be required to lecture in all grades of theory of structures and building construction.

The successful applicant will be eligible, subject to passing a medical examination, to contribute to the State Superannuation Fund.

First-class ship fare to Sydney of the appointee and his family will be paid.

Four copies of applications, including the names of two referees, should be lodged with the Agent General for New South Wales, 56 Strand, London, W.C.2, and a copy forwarded by airmail in an envelope marked "University Appointment" to the Bursar, The University of New South Wales, Post Office, Box 1, Kensington, New South Wales, Australia, before August 26, 1959. [5444

Borough of Jarrow
CHIEF ASSISTANT ARCHITECT

APPLICATIONS are invited for the above appointment on Grade APT IV. Applicants should be A.R.I.B.A. Details and application form obtainable from Borough Engineer, Town Hall, Jarrow, Co. Durham, and completed applications must reach the undersigned not later than August 26, 1959.

M. L. ROTHFIELD,
Town Clerk.
[5450

Kent County Council

INVITES applications for superannuable appointments in the PLANNING DEPARTMENT as follows:

(a) **Architectural Assistant** in the Headquarters at Maidstone. Salary within Grade APT IV (£1,065/£1,220). Candidates must be Associates of the Royal Institute of British Architects or hold an equivalent qualification. The work will be connected with architectural control and the redevelopment of central areas.

(b) **Planning Assistant.** Salary within Grade APT I (£610/£765) or APT II (£765/£880). Applicants must hold an appropriate University degree or diploma or have passed a recognized intermediate professional examination.

The commencing point on the salary scales in each case will be fixed in relation to qualifications and experience. The National Scheme of Conditions of Service applies and registered disabled persons will be considered.

Applications with names of two referees to County Planning Officer, County Hall, Maidstone, by September 7, 1959. [5459

Borough of Harrow
TECHNICAL ASSISTANT
Building Byelaws

APPLICATIONS are invited from qualified Building Inspectors for the above appointment in the Department of the Borough Engineer and Surveyor, within APT Grade II (£765/£880 per per annum) plus London Weighting.

The duties will be mainly in an office advising applicants regarding the Council's building byelaws and other matters normally dealt with in the Building Inspectors' Section.

The appointment will be subject to the Local Government Superannuation Acts and the National Joint Council's Scheme of Conditions of Service. Housing accommodation is not offered. Contributions towards removal expenses will be considered.

Application forms, obtainable from me, must be returned not later than August 31, 1959.

D. H. PRITCHARD,
Town Clerk.

Town Clerk's Office.
Harrow Weald Lodge,
92 Uxbridge Road,
Harrow, Middlesex. [5442

Somerset County Council
Architect's Department

APPLICATIONS are invited for the following appointments on the established staff, viz.:

(a) **Senior Assistant Architects.** APT Grade IV (£1,065/£1,220).

Applicants for posts in this grade must be Associate Members of the Royal Institute of British Architects with a good standard of design ability and a sound knowledge of modern methods of construction and be capable of handling projects from sketch plans to completion.

(b) **Assistant Architect,** Special Grade (£785/£1,070).

Applicants must have passed Parts I and II of the R.I.B.A. final or special examination, or the equivalent at one of the recognized schools of architecture. Commencing salary will be within the grade, dependent upon the candidate's qualifications and experience.

(c) **Architectural Assistant,** APT Grade I (£610/£765).

Applicants must have passed the Intermediate Examination of the Royal Institute of British Architects.

(d) **Junior Quantity Surveyor,** APT I (£610/£765) (subject to adoption by County Council):

Applicants must have passed the Intermediate Examination of the Royal Institution of Chartered Surveyors and to have had several years' experience in an approved office.

All appointments are subject to the usual conditions of Local Government Service. Applications, accompanied by the names of two persons to whom reference can be made, should reach the undersigned not later than Monday, August 24, 1959.

R. O. HARRIS, F.R.I.B.A.
County Architect.

Park Street,
Taunton.
August 6, 1959. [5461

The University of Manchester
ASSISTANT BUILDINGS OFFICER

APPLICATIONS are invited for the position of Assistant Buildings Officer in the Bursar's Department. An architectural or other appropriate qualification would be an advantage. Salary in the range £1,000/£1,250 per annum, according to qualifications and experience. In addition a children's allowance (£50 per annum for each child in receipt of full-time education) is payable. The post carries membership of the Federated Superannuation System for Universities.

Applications should be sent as soon as possible to the Bursar, The University, Oxford Road, Manchester, 13, from whom further particulars may be obtained. [5447

Welsh Regional Hospital Board
SENIOR ASSISTANT ARCHITECT
New 512 Bed Hospital at Swansea

APPLICATIONS are invited from Registered Architects for following pensionable post on temporary staff of the Regional Architect, 5/7 Museum Place, Cardiff, in connection with the preparation of drawings and specifications for the above new hospital.

Salary: £1,050 x £30(3) x £35(3) —£1,245.

Experience in hospital design, though desirable, is not essential, but applicants should be widely experienced in general architectural practice.

Applications, stating age, qualifications, experience, present position and salary, together with names of two referees, should be addressed to the Secretary of the Board, Temple of Peace and Health, Cathays Park, Cardiff (from whom further information may be obtained) within fourteen days of this advertisement appearing. [5467

APPOINTMENTS (cont)

Borough of Crosby
CAPITAL WORKS PROGRAMME

APPLICATIONS are invited for the appointment of a Principal Architectural Assistant at a salary in accordance with APT IV of the Conditions of Service (£1,065/£1,220).

The successful applicant will be required to take charge under the Chief Assistant of Architectural Works other than housing and in particular the construction of the new swimming bath.

It is the Council's policy to assist in the provision of housing accommodation on satisfactory proof of need.

Applications on forms obtainable from the Borough Engineer at the address below must be received, suitably endorsed not later than Monday, August 31, 1959.

Canvassing directly or indirectly will disqualify.

HAROLD O. ROBERTS,
Town Clerk.

Town Hall,
Waterloo,
Liverpool, 22. [5458

Hampshire County Council

ASSISTANT ARCHITECT (Special Scale £785/£1,070) required in the County Architect's Department. Candidates must have passed Parts I and II of the R.I.B.A. Final Examination, or equivalent, and have had at least five years' experience (including the period spent in theoretical training). The commencing salary will be determined by experience and ability. The post is pensionable and subject to a satisfactory medical report. Assistance given with removal and other expenses in approved cases.

Application forms (sent s.a.e.) returnable by August 26 from the Clerk of the County Council, The Castle, Winchester. [5455

Tonbridge Rural District Council
ARCHITECTURAL ASSISTANT

APPLICATIONS are invited for the abovementioned appointment at a commencing salary of £785 in accordance with the Special Grade (£785/£1,070 per annum).

The appointment is subject to the National Scheme of Conditions of Service and to the passing of a medical examination.

If required, assistance will be given by the Council in the provision of housing accommodation.

Forms of application may be obtained from and should be returned to the Engineer and Surveyor at the undermentioned address not later than Saturday, September 5, 1959.

C. KIRBY,
Clerk of the Council.

48 Pembury Road,
Tonbridge,
Kent. [5457

AIR MINISTRY WORKS, DESIGN BRANCH, requires in London and Provinces Architectural Assistants experienced in planning/preparation of working drawings and details for permanent and semi-permanent buildings. Salaries in London up to £900 for Grade III and £1,055 for Grade II p.a. for men and £868/£1,008 for women. Somewhat lower in Provinces. Starting pay dependent on age, qualifications and experience. Long-term possibilities with promotion and pension prospects. Five-day week, three weeks three days leave a year initially. Overseas tours (for men) for which special allowances are payable. Normally natural born British subjects. Write stating age, qualifications, employment details including type of work done to any Employment Exchange, quoting Order No. King's Cross 1769. [1769

AN ARCHITECT with a taste for good living and mountain air, and with considerable ability to interpret and develop sketch designs, with a few years' practical experience and a bright, resilient temperament, is invited to apply for a post in Lausanne to work on hospital projects for West Africa. A maximum salary equivalent to approximately £1,500 p.a. is offered.

At the same time three young, enthusiastic, qualified (if only recently) architects who are good draughtsmen and are prepared to work for periods at high pressure, are invited to apply for posts as architectural assistants in London to assist on working drawings both for hospitals referred to above and other general projects in West Africa. A minimum salary of £700 p.a. is offered. In all cases the salary agreed will depend on qualifications, experience and ability.

The London posts offer the future opportunity of a tour of duty in West Africa to suitable people.

Interested architects should apply in writing stating which post they are interested in, to: William F. Vetter and Kenneth Scott Associates, Architects, 154 Shepherds Bush Road, London, W.6. [5418

The Royal Infirmary of Edinburgh and Associated Hospitals
ARCHITECTURAL ASSISTANT

APPLICATIONS are invited from experienced candidates, preferably holding the Intermediate Certificate of the R.I.B.A. Starting salary £525/£605 per annum, according to age and experience. Apply to Personnel Officer, Royal Infirmary, Lauriston Place, Edinburgh, 3. [5417

British Solomon Islands Protectorate
ARCHITECTS
Public Works Department

TO be responsible for the design and construction by direct labour and contract of Government buildings, preparation of contract documents and estimates.

Contract appointments. Salary range £1,628/£1,860 (sterling) plus gratuity. Quarters available at reasonable rent.

Candidates preferably under 35 years of age must be A.R.I.B.A. with at least eight years' post qualification experience. Experience of tropical building an advantage.

Write to Director of Recruitment, Colonial Office, London, S.W.1, giving full names, age, qualifications and experience quoting BCD 112/45/02/E1. [5427

Government of Tanganyika

EDUCATION OFFICERS (Technical Training), preferably between 25 and 40, required to teach (a) Civil Engineering and allied subjects, (b) Building Construction and Drawing and elementary Quantity Surveying and allied subjects. Qualifications for (a) Degree in Engineering or A.M.I.C.E., (b) Corporate Membership of (1) Royal Institute of British Architects or (2) Incorporated Association of Architects and Surveyors or (3) Associate of Institute of Builders. Either a teacher's certificate or minimum of two years' teaching experience essential for both posts. Posts on contract/resettlement grant terms. Home pension rights can be preserved. Salary at appropriate points in scales £879/£1,617 or £939/£1,863 inclusive. Quarters at low rental. Free passages and medical attendance. Outfit and education allowances. Tour of service 30-36 months. Low income tax. Generous home leave. Further particulars and application forms from the Director of Recruitment, Colonial Office, London, S.W.1, quoting BCD 114/8/05(b). [5341

Inverness County Council

INVITE applications for appointments in the County Architect's Department as follows:

(a) **1 First Assistant Architect,** salary scale £1,055/£1,085 per annum.

(b) **1 Second Assistant Architect,** salary scale £760/£1,040 per annum.

(c) **2 Third Assistant Architect,** salary scale £595/£725 per annum.

Applicants for appointments (a) and (b) must be fully qualified and for appointment (c) should be qualified or about to qualfiy to intermediate standard. Appropriate placing on salary scales will be given in accordance with qualifications and experience. Housing accommodation may be made available if required. Applications, together with names and addresses of three referees to the County Clerk, County Buildings, Inverness, within 14 days from the appearance of this advertisement. [5432

Borough of Harrow
PLANNING ASSISTANT

APPLICATIONS are invited for the appointment of a Planning Assistant in the Department of the Borough Engineer and Surveyor within APT Grade I (£610/£765) plus London Weighting.

The appointment will be subject to the Local Government Superannuation Acts and the National Joint Council's Scheme of Conditions of Service. Housing accommodation is not offered. Contributions towards removal expenses will be considered.

Application forms, obtainable from me, must be returned not later than August 31, 1959.

D. H. PRITCHARD,
Town Clerk.

Town Clerk's Office,
Harrow Weald Lodge,
92 Uxbridge Road,
Harrow Weald.
Harrow. [5451

London Electricity Board
SENIOR DRAUGHTSMAN

APPLICATIONS are invited for the above position in the Board's Southern District in the Camberwell/Brixton area.

Candidates should have had a good general education and possess the Ordinary National Certificate in Building or its equivalent, and be capable of supervising Engineering Draughtsmen and other drawing office staff.

The post is graded under Schedule "D" of the National Joint Board Agreement as Grade 5, £830/£940 per annum, inclusive of London Allowance.

Application forms obtainable from Personnel Officer, 46 New Broad Street, London, E.C.2, to be returned completed within 14 days from the publication date of this advertisement. Please quote ref—PER/2694/AA. [5453

Welsh Regional Hospital Board
Regional Architect's Division

APPLICATIONS are invited for the post of Principal Assistant Architect on the permanent staff of the Regional Architect in accordance with Whitley Council Conditions of Service. The salary is in accordance with Scale II—£1,195 x £45(2) x £15(1) x £45(2) x £30(1)—£1,420.

Applicants must be Registered Architects and thoroughly experienced in the preparation of working and detailed drawings, specifications and supervision of works in progress. A knowledge of hospital planning and design is essential.

The successful candidate will be responsible to the Regional Architect for a major division of work, involving travelling throughout the principality. A motor mileage allowance and subsistence expenses in accordance with scale will be payable.

Applications, stating age, qualifications, experience, present and previous appointments and salary, the names of three referees, should be sent to the Secretary, Temple of Peace and Health, Cardiff, within 14 days of appearance of advertisement. [5468

Welsh Regional Hospital Board

APPLICATIONS invited from Registered Architects for post of Temporary Assistant Architect on staff of Regional Architect, 7 Museum Place, Cardiff, at a salary of £730 x £25(2) x £30(2) x £35(5) x £40(1)—£1,055.

Applicants must be Registered Architects having passed the final examination of the R.I.B.A. and well experienced in the preparation of one-eighth scale working drawings, details, specifications, surveying, levelling and the supervision of contracts. Appointment subject to National Health Service Regulations and terminable by one month's notice on either side. Successful candidate will be required to pass a medical examination.

Applications, stating age, experience, qualifications, present position and salary, and the names of two referees to the Secretary, Welsh Regional Hospital Board, Temple of Peace, Cardiff, within 14 days of appearance of advertisement. [5469

Consett Urban District Council
APPOINTMENT OF
ARCHITECTURAL ASSISTANT

APPLICATIONS are invited for the above permanent appointment in the Surveyor's Department at a salary of £785 per annum rising by annual increments of £40 to a maximum of £1,070 per annum (starting salary according to qualifications and experience).

Candidates must have passed Parts I and II of the R.I.B.A. Final and Special Final examination or their equivalent at one of the recognized schools of architecture and should have had experience in housing work with a local authority. The appointment will be subject to the National Conditions and Provisions of the Local Government Acts, one month's notice on either side and the passing of a medical examination. The Council will assist the successful applicant in obtaining housing accommodation if required.

Applications in envelope endorsed "Architecturel Assistant" giving details of age, qualifications and experience together with names and addresses of three persons to whom reference may be made are to be addressed and delivered to the undersigned not later than Saturday, September 12, 1959.

Candidates must declare their relationship, if any, with any member or senior official of the council.

J. QUINN,
Clerk of the Council.

Council Offices,
Medomsley Road,
Consett,
Co. Durham.
August 6, 1959. [5470

Leeds Regional Hospital Board
CLERK OF WORKS (Building and Structural)
Proposed New General Hospital at Huddersfield

APPLICATIONS are invited for the appointment of a temporary Clerk of Works (Building and Structural), in connection with the construction of a new (600 bed: approximate contract value £3,500,000) General Hospital at Huddersfield. £1,000 per annum.

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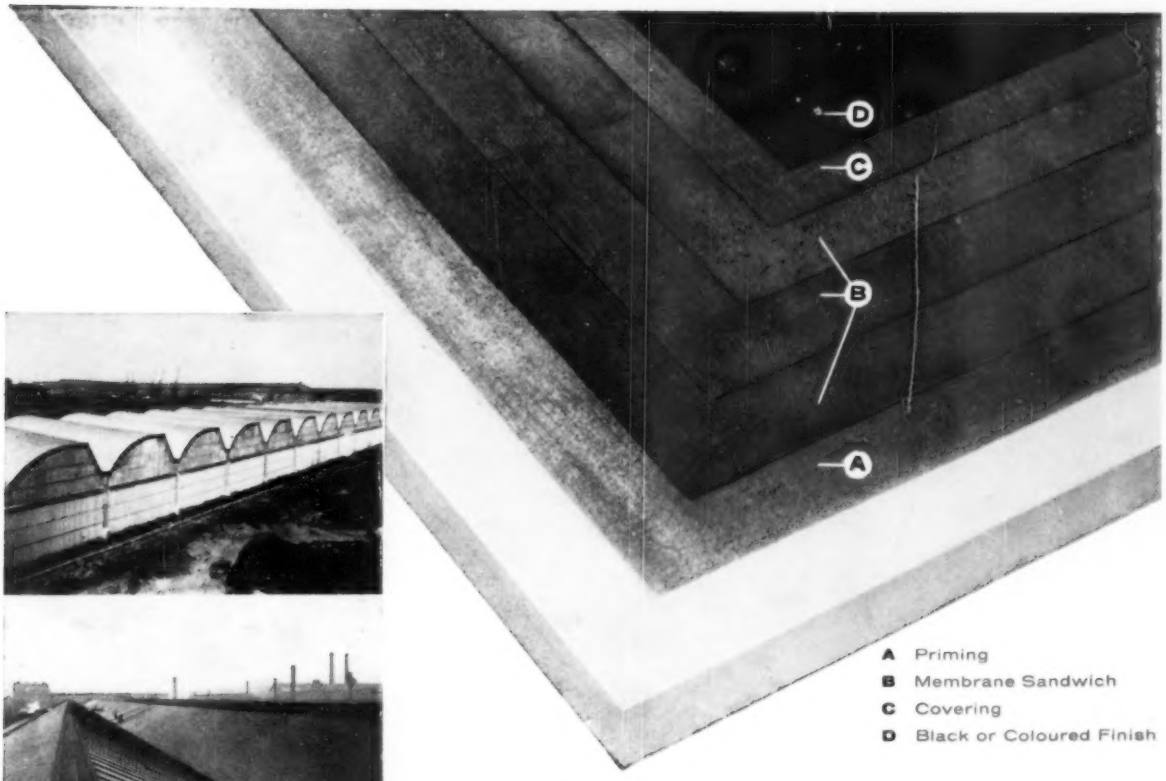

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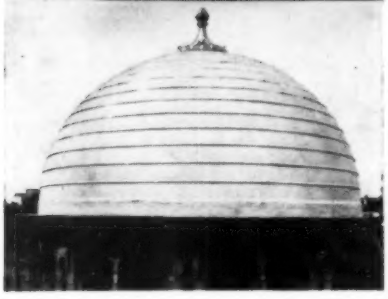

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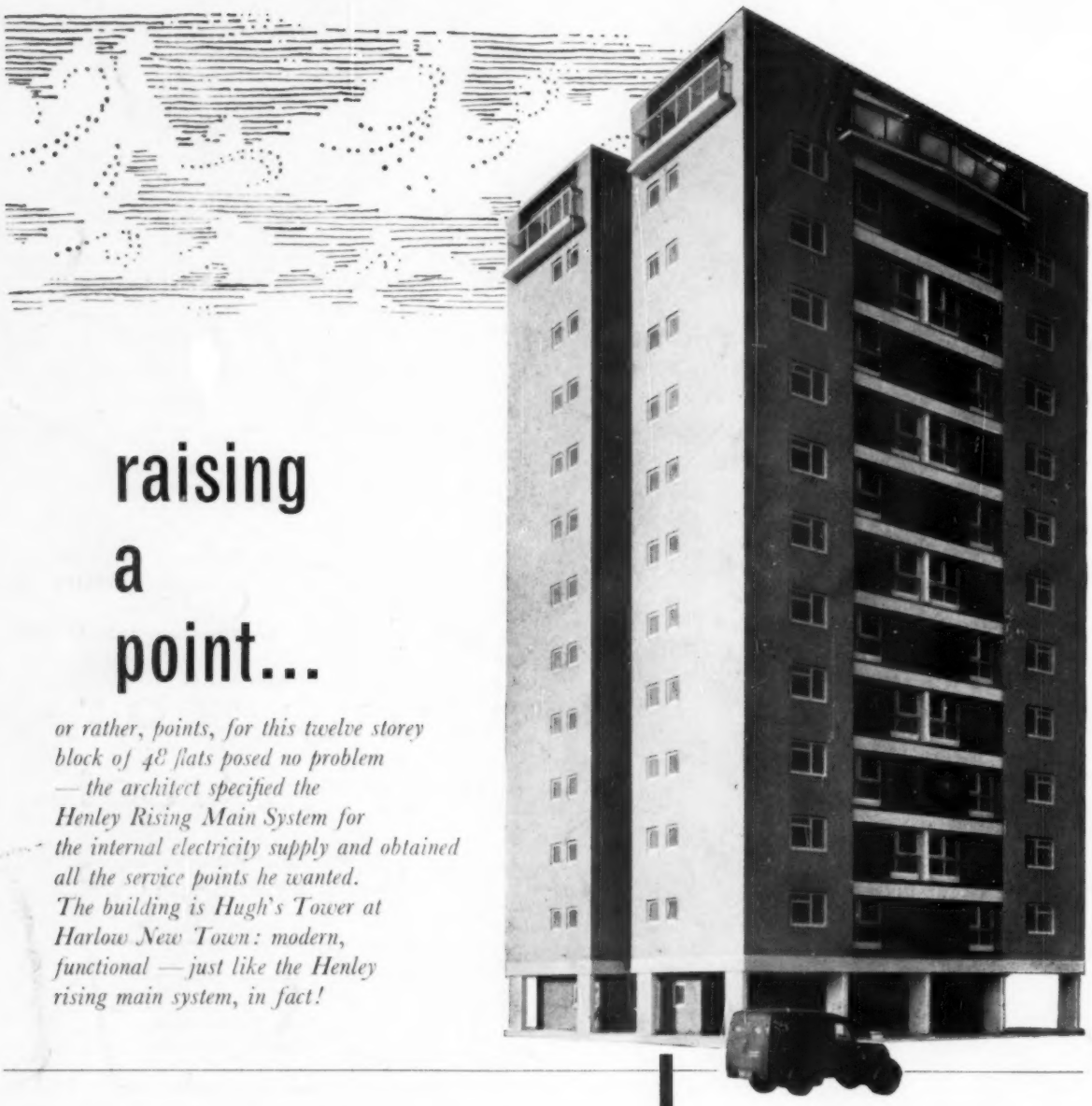

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